

MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS 196: A

MA 128153

ASSESSMENT OF THE STUDY OF ARMY LOGISTICS 1981

Volume II ANALYSIS OF RECOMMENDATIONS

FEBRUARY 1983



DITC FILE COPY

Approved for principle of Distribution of a condition of the additional of the addit

85 04 20 002

ASSESSMENT REPORT STUDY OF ARMY LOGISTICS - 1981 VOLUME II - DETAILED ASSESSMENTS - UNCLASSIFIED FEBRUARY 1983

Prepared by

The Office of the Deputy Chief of Staff for Logistics

Headquarters, Department of the Army

Washington, D.C.

CONTENTS

VOLUME I - EXECUTIVE SUMMARY (UNCLASSIFIED) (PUBLISHED SEPARATELY)

VOLUME II - DETAILED ASSESSMENTS - UNCLASSIFIED

TOPIC

PAGE

Index

iii thru x

Assessments

1 thru 416

VOLUME III - DETAILED ASSESSMENTS - SECRET NORFORN (PUBLISHED SEPARATELY)



Acces	sicn For	1
NTIS	GRA&I	
DTIC	TAB	Ò
Unann	ounced	
Justi	fication_	
PEA	CALL	
By P	er Le	TTER
Distr	ibution/	SE TITLE
Avai	lability (odes
	Avail and	or
Dist	Special	
•	1	
Λ	1 1	
n	1 1	

i

		Implementation	
Recommendation	Topic	Status	Page
Number	10010	Control of the Contro	
•	Simple, Standard PLL	Continuing	1
1	Simple PLL	Implemented	1
1A	Simple PLL	Implemented	1
1B	Catalog Data	Continuing	5
1B(1)	Catalog Data	Continuing	9
1B(2)	PLL Manual	Implemented	1
1C	Simplify PLL Tasks	Continuing	1
1 D	Discipline PLL System	Continuing	1
lE	Authorize E-5	Continuing	13
1 F	PLL Storage	Continuing	1
1G	Status Actions	Implemented	15
1H	PLL Training	Continuing	17
11	Supply Warrant Officer	Implemented	1
IJ	PLL Training	Continuing	13
1 K	Management Information	Continuing	1
ll	Technology	Continuing	1
1 M	PLL Clerk CMF	Assessment Ongoing	21
1 N	SAILS Status Test	Implemented	15
10	DS4	Continuing	15
1P	Status Request	Continuing	15
10	PLL Data Base	Continuing	23
1 R	Distributive Data Base	Continuing	25
18	Combat PLL	Continuing	27
1 T	Forward Maintenance	Implemented	29
2	Forward Maintenance	Implemented	29
2A	Forward Maintenance	Implemented	29
2B	Forward Maintenance	Implemented	29
2 C	Forward Maintenance	Implemented	29
2D	Forward Maintenance	Implemented	29
2 E	Forward Maintenance	Implemented	29
2 F	Commodity Orientation	Adopted in Part	31
2G	os Mobility	Implemented	35
2 સ	GS Location	Assessment Ongoing	37
3	TMDE Program	Continuing	39
4		Assessment Ongoing	41
4A	EQUATE Maintenance Policy	Continuing	43
48	TMDE Program	Continuing	39
4C	ATE and BITE	Continuing	45
4D	Levels of Maintenance	Implemented	49
5.	reacts of Harmenance	*	

Index

Recommendation		Implementation		
Number	Topic	Status	Page	
6	Planning Cell	Implemented	51	
6 A	Scenario-Based Planning	Continuing	51	
6B	Plan thru Year 2000	Continuing	51	
7	Doctrine	See Below	53	
7A	MTMC and Doctrine	Not Adopted	53	
7B	DARCOM and Doctrine	Implemented	53	
7C	Doctrine Integration	Not Adopted	53	
7 D	Doctrine Approval	Not Adopted	53	
7E	Doctrine Interface	Not Adopted	53	
7 F	Joint Doctrine	Implemented	53	
8	Eliminate Part #'s	Continuing	57	
9	Reparable Return	Continuing	59	
9A	Reparable Management	Continuing	61	
9B	Reparable Follow-Up	Continuing	· 61	
9C	Reparable Control	Continuing	65	
9D	Reparable Visibility	Implemented	65	
9E	Reparable Coding	Continuing	67	
10	Construction In Theater	See Below		
10A	Publish Construction Policies	Continuing	69	
10B	Improve Intelligence	Continuing	71	
10C	Engineering Support Plan	Continuing	75	
10D	Base Design	Continuing	77	
10E	Base Development	Continuing	79	
10F	Base Development	See Volume III		
11, 11A thru 11H	Automation Commodity Command	Assessed separately by HQ DARCOM		
12	Force Modernization	Implemented	81	
12A	Force Modernization	Implemented	81	
12B	Force Modernization	Implemented	81	
13	Excellence Centers	Continuing	83	
14	DARCOM Europe	Continuing	85	
15	BOIP/QQPRI	Continuing	87	
16	TAADS Documents	Continuing	89	
17	Personnel Management	Continuing	91	

Index

Recommendation		Implementation	-
Number	Topic	Status	Page
		Implemented	93
18	Total Army Analysis	Imbismencea	• -
	Rates Ammunition Rates	Continuing	95
19	Ammunition Rates Ammunition Rates	Continuing	97
19A	Ammunition Rates Ammunition Rates	Continuing	95
19B		Continuing	99
20	Graves Registration	Implemented	103
20A	Graves Registration	Continuing	99
20B	Graves Registration	Continuing	99
20C	Graves Registration	See Below	105
21	Force Management	Continuing	105
21A	Force Management	Continuing	105
21B	Force Management	See Volume III	
22	Strategic Mobility	See Volume III	
23	Port Vulnerability	Continuing	107
24	Ammo Storage Areas	Continuing	107
24A	Ammo Storage Areas	Continuing	107
24B	Ammo Storage Areas		109
25	Logistics Over-the-	Continuing	
	Shore	Continuing	111
26	Containerization	-	113
27	ILS/ISS	Continuing	113
27 A	ILS/ISS	Continuing	110
28	ILS	See Below	115
28A	ILS	Continuing	117
28 B	ILS	Adopted in Part	119
28 C	ILS	Not Adopted	121
28D	ILS	Not Adopted	123
28 E	ILS	Implemented	125
28 F	ILS	Adopted in Part	127
28G	ILS	Continuing	127
28 H	ILS	Continuing	131
28 I	ILS	Implemented	131
28J	ILS	Continuing	135
28 K	ILS	Continuing	137
28L	ILS	Continuing	137
28 M	ILS	Continuing	
28 N	ILS	Implemented	141
280	ILS	Continuing	143
28 P	ILS	Adopted in Part	145

Recommendation		Implementation	
Number	Topic	Status	Page
28 Q	ILS	Continuing	147
28 R	ILS	Implemented	149
28 S	ILS	Continuing	151
29	Pre-Award Surveys	Continuing	153
29 A	Pre-Award Surveys	Continuing	153
29B	Cost Control	Implemented	155
29 C	Cost Control	Continuing	157
30	Production Expertise	Continuing	159
30A	Production Expertise	Continuing	159
30B	Production Expertise	Continuing	159
31	Industrial Capability	Continuing	163
31A	Industrial Capability	Continuing	163
31B	Industrial Capability	Continuing	163
31C	DARCOM Wartime Surge	Continuing	165
31D	Industrial Capability	Continuing	163
32	Energy Conservation	Continuing	167
32A	Energy Conservation	Continuing	167
32B	Energy Conservation	Continuing	167
32C	Energy Conservation	Continuing	167
33	R&D Planning	See Below	169
33A	R&D Planning	Continuing	169
34	Energy Efficiency	Continuing	171
35	ADPE	Continuing	173
36	PDSS	Continuing	175
37	Initial Provisioning	Continuing	177
38	Facilities	Continuing	179
38A	Construction	Continuing	181
38B	Construction	Continuing	181
38C	Facilities	Continuing	183
39	DCAS Support	Continuing	185
39 A	DCAS Support	Continuing	185
39 B	DCAS Support	Continuing	185
40	Support Costs	Continuing	187
41	Technical Training	Continuing	189
42	New Equipment Training	Continuing	191
43	Skill Performance Aids	Continuing	193
44	Dual Specialty Training	Continuing	197
45	Mobilization Planning	Implemented	199
46	Minerals Policy	Continuing	201

Recommendation		Implementation	_	
Number	Topic	Status	Page	
47	Strategic Materials	Not Adopted	203	
48	National Critical Skills	Continuing	205	
49	Tax Credits	Implemented	207	
50	Progress Payments	Implemented	209	
51	Contract Management	Continuing	211	
52	Planning Guidance	Continuing	213	
53	Requirements	Not Adopted	215	
54	PERSACS	Continuing	217	
55	Procurement Changes	Continuing	219	
56	Consumption Factors	Implemented	223	
57	TAEDP/PEM	Continuing	225	
58	Cost Estimating	Implemented	227	
59	Cost Control	Continuing	229	
60	Initial Operational Capability	Implemented	233	
61	Materiel Fielding Dates	Adopted in Part	235	
62	PM/TSM Duties	Continuing	237	
63	System Managers	Continuing	239	
64	System Managers	Continuing	239	
65	Financial Management	Continuing	241	
66	Financial Management	Continuing	243	
67	Financial Management	See Below		
67A	DA Set-Aside	Continuing	245	
67B	Capital Investment	Implemented	247	
67C	Capital Investment	Not Adopted	249	
68	Capital Investment	Continuing	255	
69	Capital Investment	Continuing	257	
70	Capital Investment	Not Adopted	259	
71	Capital Investment	Continuing	261	
72	Capital Investment	Continuing	263	
73	Capital Investment	Continuing	265	
74	DARCOM Productivity	See Below		
74 74A	RESHAPE	Continuing	267	
74B	Profit Sharing	Assessment Ongoing	269	
74.5 75	Security Assistance	See Below		
75 A	Contingency Stockpile	See Volume III		
/ JB	Contingency Stockpile	See Volume III		

Recommendation		Implementation	
Number	Topic	Status	Page
75C	FMS Personnel	Continuing	271
75D	SSA Case Management	Continuing	273
75E	Discrepancy Records	Not Adopted	275
76	Army Stock Fund	Continuing	277
77	Consumables	Continuing	279
77A	Consumables	Continuing	279
77B	Consumables	Continuing	27 9
77C	Consumables	Continuing	279
77D	Consumables	Continuing	279
77E	Consumables	Continuing	279
77F	Consumables	Continuing	279
77G	DLA Planning	Continuing	283
77H	Consumables	Continuing	279
78	NBC FTDE	Continuing	285
79	NBC Vulnerability	Continuing	287
80	CSS MAA	Continuing	289
81	APODs	See Volume III	
82	APODs	See Volume III	
83	ALOC	See Volume III	
84	MINET	Continuing	291
85	ALOC Training	Continuing	293
86	GS Supply Base	See Volume III	
87	DSS/ALOC	Continuing	295
88	Corps MCCs	Continuing	297
89	Installation Maintenance	See Below	
89A	Maintenance Workload	Continuing	301
89B	Maintenance Guidelines	Continuing	301
89C	Equipment Redistribution	Continuing	303
89D	Mobilization Support	Continuing	305
89E	Component Repair	Continuing	307
89F	Redistribution	Continuing	309
90	Railway Units	See Volume III	
91	Logistics Aircraft	Not Adopted	311
92	Movement Doctrine	Continuing	313
93	Truck Procurement	Continuing	317
94	Airdrop Resupply	Continuing	319
95	Port Use	See Volume III	

Index

Recommendation		Implementation	_
Number	Topic	Status	Page
06	CC DOL Company	Cambinuina	224
96	GS POL Capability	Continuing	321
97	POL Coupling DFSC/MSC Tanker Fleet	Continuing	323
98		Continuing	325
99	POL Loss Factors	Implemented	327
100	POL Readiness	Continuing	329
101	DFSC Fuel Storage	Continuing	331
102	Fuel Requirements	Continuing	333
103	POL War Reserves	Continuing	335
104	POL Division 82	Continuing	337
105	POL Consumption	Continuing	339
106	POL Management	Continuing	341
107	Mobility Fuels	Continuing	343
108	Mobility Fuels	Continuing	345
109	Installation POL	Continuing	347
110 (Same as 120)		Continuing	349
110A	Covering Force Resupply	Continuing	353
111	Ammunition Maintenance	Continuing	355
112	Airlift of Ammunit'on	See Below	
112A	Airlift of Ammunition	Continuing	357
112B	Airlift of Ammunition	Continuing	357
112C	Rigging Equipment	Continuing	359
112D	Rigging Equipment	Continuing	359
112E	Airlift Doctrine	Continuing	361
112F	Rigging Equipment	See Volume III	
113	Ammunition Throughput	See Below	
113A	Ammunition Throughput	Continuing	363
113B	Ammunition Throughput	Continuing	365
114	Motorcycles	Continuing	367
115	Ammunition Doctrine	Continuing	369
116	Ammunition Packaging	Continuing	371
117	Ammunition Packaging	Implemented	373
118	Packaging, NBC	Continuing	375
	Environment	0	
119	Ammunition Packaging	Implemented	377
	MHE for Ammunition	Continuing	349
121	Ammunition Consumption	Continuing	379
122	SAAS-4	Continuing	383
124	Water	Continuing	389
•		÷	

Volume II

Recommendation		Implementation	
Number	Topic	Status	Page
125	Combat Arms Detail	Assessment Ongoing	391
126	Warrant Officers	Not Adopted	393
127	RC Training	Continuing	395
127A	RC NET Training	Continging	395
127B	RC Annual Training	Contin 3	395
127C	Affiliation Program	Conti ng	395
128	Enlisted Training	See Bu	189
128A	Level l Skill Tasks	Contir 'g	189
128B	Installation Training	Conti:	189
128C	Theory Training	Conti :	189
128D	Logistics Skill Tasks	Conting	189
129	NCO Training	Continuing	397
129A	NCO Training	Continuing	397
129B	Enlisted Promotions	Not Adopted	401
130	Productivity	Continuing	405
131	Containers	Continuing	409
132	Containers	Assessment Ongoing	411
133	Containers	Assessment Ongoing	411
134	Containers	Assessment Ongoing	411
135	Containerization	Continuing	111
136	COMPO-4 Units	Continuing	413
137	EUCOM/NAMSA	Implemented	415

X

TOPIC: PLL

RECOMMENDATION NUMBERS: 1, 1A, B, C, D, E, G, J, L, M

STUDY LOCATION (VOLUME-PAGE): 16-51 thru 16-53

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- 1. Reference Study of Army Logistics 1981, Section 16, pages 46-54.
- 2. Statement of Recommendation: "Develop simple, standardized automated unit repair parts supply system:
 - o Upgrade PLL clerks in realigned career field.
- o Upgrade supply training for Motor Sergeants and Maintenance Technicians.
- a. Provide a simplified PLL system with adequate number of trained personnel.
 - b. Simplify system at PLL level.
 - c. Develop manual to outline PLL procedures.
 - d. Simplify tasks, standardized worldwide.
 - e. Discipline system.
 - g. Authorize standardized storage cabinets.
 - j. Use added Supply Warrant to assist in supervision of PLL.
 - m. Take advantage of Technology for soldier level system."
- 3. Rationale for Recommendation: Recommendation stems from the US Army Human Engineering Laboratory (HEL) Repair Par's Study. This study was undertaken in July 1978 to find and resolve problems in the repair parts supply system that had led to widespread lack of confidence in the system's ability to provide needed parts. The final report, issued in February 1980, concluded that the repair parts supply system is too complicated for current soldiers, of all grades, to operate. ODCSLOG assigned specific tasks to responsible agencies in July 1980, to implement the 74 study recommendations. Two In-Process Reviews (IPR) of Army progress in implementing the HEL recommendations have been conducted. Third IPR is scheduled for 15 April 1982. Twenty-nine of the original seventy-four recommendations are still in various stages of implementation. Short-term, low-cost recommendations have been implemented.

1

- . Analysis of Recommendation: Status of the selected HEL recommendations addressed by LOG 81 is as follows:
- o HEL recommended that the aptitude selection criterion for the PLL clerk MOS (76C) be significantly higher (105) than that for the unit supply clerk/armorer (95). ODCSPER is conducting an enlisted training management system review to analyze the justification for a higher aptitude score and assess the impact on attrition, recruitment objectives, and other factors. A decision is expected by end of 3d Qtr FY 82.
- o HEL recommended an advanced NCO course for E6-63C30 include 40 hours of repair parts instruction and 24 hours on the Direct Support Unit Standard Supply System (DS4). This recommendation has been satisfied by an advanced DS4 Procedure Course which began at Fort Lee, VA, in November 1980 for officers, warrant officers, and enlisted personnel.
- a. ODCSLOG initiated the standardized combat PLL/ASL program in 1979. Program was implemented on 1 October 1981, by DA Circular 700-81-2. Combat PLLs have been developed for a Mechanized Infantry Company and a Tank Company. Combat PLLs for all other units in an Armored and Mechanized Infantry division will be completed during FY 82. Program is funded through FY 87 to develop combat PLLs for every unit in both Active and Reserve components. A new AIT program for the PLL clerk was implemented in November 1980 in support of the newly developed 76C MOS (PLL clerk). Course provides coverage of pure PLL, TAMMS, Shop Stock Clerk, and DS4 procedures.
- b. Extension of DS4, implementation of the Combat PLL program, and a complete rewrite of AR 710-2, the regulation governing PLL operations, are all aimed at providing a standardized repair parts supply system which is easily understood by the PLL Clerk.
- c. DA Pamphlet 710-2-1, Using Unit Supply Procedures, provides the PLL clerk with manual PLL procedures which have been reduced from a reading grade level of 14.7 to 8. This is a companion pamphlet to AR 710-2 and becomes effective 1 April 1982. Field response to this document has been extremely favorable.
 - d. Simplification of the PLL clerk's tasks is being achieved through:
 - (1) Standardization of PLLs by the Combat PLL/ASL Program.
 - (2) Increased automation support to the PLL clerk from DS4.
- (3) ODCSLOG vigilance to reduce unnecessary administrative requirements placed on PLL clerks. Recent example is the Status Reduction Program which eliminates unnecessary follow-up action on supply requests.

- (4) The recently initiated DCSLOG Supply and Maintenance Assessment and Review Team (SMART) Project has also examined duties and functions for the PLL clerk, and made findings and recommendations to simplify requirements for this individual. Initiatives recommended by this team are being examined along with others received from the field. Some will be implemented Army-wide without further test. Others \mathbf{w}_{-} th unproven, but potential benefit will be tested on an expedited basis by the US Army Logistics Center at a "hands-on" test site established at the 24th Infantry Division, Ft Stewart, GA.
- e. Discipline of the repair parts supply system is achieved through the following:
- (1) Local supplementation of DA policy and procedure may only be accomplished after HQDA approval.
- (2) Incorporation of standard retail supply instruction in the baseline logistics curriculum of Army schools.
- (3) Insuring that retail supply operations are a continuing item of interest in DAIG and Command Logistics Review Team (CLRT) visits.
- g. Both the HEL study and the Combat PLL/ASL program have recognized the requirement for a mobile PLL storage capability. TRADOC milestone for development of a requirement document is 1 November 1982.
- j. HEL recommended approval of revised divisional maintenance battalion TOEs which were in staffing at the time of the study. These TOEs were approved and authorized a supply warrant in the Technical Supply Office of the Maintenance Battalion. A companion recommendation called for added training in repair parts supply procedures for newly commissioned 630A warrants. US Army Ordnance Center and School has changed the Basic Warrant Officer program of instruction to provide this training.
- l. DS4 is the Army standard management information system for PLL. Extension of the DS4 system to active Army divisions in progress now. Completion is projected for end of calendar year 84.
- m. ODCSLOG goals for automation are to develop a system of increased automated support to Supply Support Activities, especially dedicated support such as the Decentralized Automated Service Support System (DAS3) hardware and the Division Level Data Entry Device (DLDED). This equipment will provide direct functional assistance to the Material Management Center, Forward Support Units, and the PLL clerk.
- 5. Benefits of Implementation: An improved supply system for repair parts will both restore confidence in the system's ability to provide repair parts and insure that responsive support is provided during wartime operations.

- 6. Resources Required for Implementation:
- a. Through FY 88, \$59 million is required to complete the combat PLL program.
- b. DLDED requirements are under significant revision. Definitive program requirements now under development.
- c. Through FY 88, \$288 million is required to complete the fielding of DAS3.
- 7. Method of Implementation: DA Circular 700-81-2, 1 Oct 81, implements the Combat PLL/ASL program. Office of primary responsibility for implementation of automated supply systems is ODCSLOG. ODCSLOG is also proponent for AR 710-2, Supply Policy Below Wholesale, which prescribes PLL policy.
- 8. Relationship to Other Studies: Recommendation is extracted from the US Army Human Engineering Laboratory (HEL) Study. Recommendation complements those of HEL and the initiatives of the Combat PLL/ASL Program.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: Recommendation 1N called for a change in the PLL Clerk Career Management Field from 76 to 63. This is being reported out separately by ODCSPER.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC, Army Logistics Assessment Office, and ASA(IL&FM) concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: CATALOG DATA DISTRIBUTION

RECOMMENDATION NUMBER: 1B(1)

STUDY LOCATION (VOLUME-PAGE): 16-51

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

1. Reference:

a. Study of Army Logistics--1981, Section 16, pages 24-41.

b. DAS report on the Review of Federal Catalog Products (Report No. 82-085).

- 2. Statement of Recommendation: "That a complete examination of catalog data distribution covering all data distribution, timeliness and currency of data, economic distribution policies and relevant file content by level of use be conducted."
- 3. Rationale for Recommendation: The type of data required at each level of the supply systems needs to be defined. It should be tailored towards specific levels in the supply system with more easily understood products and lesser volumes of data at lower levels. Currently, data excessive to mission needs is provided to the PLL clerk/ unit level. Battalion/company level constitutes 91% of data distribution customers for the Army Master Data File (AMDF). Significant increased stability at the unit level can be achieved by selectively moving data element changes from PLL level to DSU level. Tailored catalog data will simplify the PLL task.

4. Analysis of Recommendation:

- a. Study of Army Logistics--1981 data was limited to the AMDF and not all catalog data products.
- b. The referenced DAS report found that there was no consistency to the federal catalog products distributed to various installations/levels within Army.
- c. Many federal catalog products are commodity oriented, not equipment oriented.
 - d. Not all catalog products are on computer tapes and/or microfiche.

- e. There is no doubt that some tailoring and standardization of cataloging data and products would be beneficial to reducing the cataloging burden on the soldier in the field. It would also be beneficial in the design of lower level automated systems.
- f. Both the DAS study and Study of Army Logistics--1981 point to the skill level and lack of training in the ASL/PLL clerk MOS as major problem areas requiring this type of action.
- 5. Benefits of Implementation: Standardization of federal catalog products distribution, tailoring to user levels, reduction of relevant file content by level of use and timely update of both data and products will relieve the cataloging burden on the soldier in the field and provide a logical skill level progression through the levels of the supply system.
- 6. Resources Required for Implementation:
 - a. Current resources are being utilized to assess this recommendation.
- b. It is anticipated that enhanced communications equipment will be required in the long run to implement parts of this recommendation. These have already been addressed in long range automation plans.
- 7. Method of Implementation: Several ongoing and projected actions address this recommendation.
- a. DA is working with DARCOM/TRADOC to develop a standard catalog products distribution plan. One aspect of this plan is to standardize what products are required at the various levels in the supply system, where these products are addressed by courses, and the adequacy of distribution systems.
- b. The Catalog Data Activity (CDA) is establishing a stock number user file to record user interest in National Stock Numbers (NSNs) for which catalog data update is needed. CDA will then limit change data distribution to those NSNs specifically required by the user. Procedures have been developed to allow activities to establish or delete user interest for any NSN in the Army Central Logistics Data Bank (ACLDB). Upon a request to establish user interest in an NSN, CDA will immediately distribute the file data for that NSN to the receiving activity, if needed. Rapid interrogation response would eliminate the requirement for a total Army Master Data File (AMDF) at installation level for local inquiry purposes. The National Guard has been selected as the initial participant in this system and currently has 52 units on line. CDA was tasked to develop a tailored AMDF starting with a mechanized infantry battalion, and then an armored battalion.

- 8. Relationship to other studies: DAS report on the review of Federal Catalog Products (Report No. 82-085).
- 9. Relationship to Other Recommendations within the Study of Army Logistics--1981: Further efforts in this area are addressed in response to recommendation 1B(2).
- 10. Coordination: DARCOM, ASA(IL&FM).

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: CATALOG DATA

RECOMMENDATION NUMBER: 1B(2)

STUDY LOCATION (VOLUME-PAGE): 16-51

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

1. Reference Study of Army Logistics -- 1981, Section 16, Pages 24-44.

2. Statement of Recommendation: "Develop catalog data using emerging technology and having specific capabilities."

3. Rationale for Recommendation:

- a. The present data processing techniques for maintenance, distribution, and application of logistics data have evolved over the past 15 years and represent the state of the art which was in being at the time these systems were conceived. This third generation equipment, because of its size, cost and processing characteristics, demands large scale integrated processing with a central CPU performing a myriad of functions simultaneously. Individual processes are characterized by cyclic, batch processing techniques and manually prepared input. The data initiator relies on hard copy products, computer lists, interpreted punched cards, and microfiche, to evaluate item status and determine actions required. The basic information is not always readily accessible. Due to the nature of cyclic processing, the results of input are not known for a number of days or weeks. A significant number of actions performed by the data originator are not automated.
- b. Interface between systems in Document Identifier Coded (DIC) transaction oriented, with independent edits and validation performed within each system. Additionally, data from the Army data originator must process through the Defense Integrated Data System (DIDS) prior to updating the Army Central Logistics Data Bank (ACLDB) at the Catalog Data Activity (CDA). This system architecture is responsible for the constant creation of data base incompatibilities. These conditions are perpetuated to the field units where they create major problems in manual and automated logistics systems.

4. Analysis of Recommendation:

- a. Recent advancements in the data processing industry have revolutionized the methods by which information is stored, processed, and transmitted.
- b. Equipment size and cost have plummeted while computing power and speed have increased geometrically.

- c. New techniques for transferring data between locations are making it feasible to establish networks between data processing systems.
- d. Improvements in software techniques have helped push the computing power closer to the user and enable the programs to respond more readily to user needs and permit increased user control and productivity.
- e. CDA has developed a long range automation master plan to address using emerging technology through 1990.
- 5. Benefits of Implementation: To enhance a simplified soldier support system through simplification, tailoring, automating, and communicating catalog data with state of the art technology.
- 6. Resources Required for Implementation:
 - a. No additional personnel resources are required.
- b. Equipment resources will be identified and resourced on a case by case basis as they are identified during the next two decades.
- 7. Method of Implementation: The Catalog Data Activity under DARCOM has developed an automation master plan which addresses telecommunications and ADP initiatives through 1990. This plan has been compared with the ODCSLOG Automation Master Plan and found to be compatible. The plan will be continually updated as required and currently addresses the following systems:
 - a. Automated Discrepancy Reporting.
 - b. Tailorized Distribution of Cataloging Data.
 - c. AMDF Remote Terminal Interrogation/Retrieval System.
 - d. CL Micropublishing.
- e. Catalog Distributed Data Processing Phase I Wholesale Level Catalog Distributed Data Processing.
 - f. Catalog Distributed Data Processing Phase II.
 - (1) Telecommunications Networks for DARCOM MRC.
 - (2) Telecommunications Networks for DARCOM Data Banks.
 - (3) Distributed Data Bases and Systems.

- g. Digitized Graphics for Technical Publications.
- h. Catalog Distributed Data Processing Phase III.
 - (1) Telecommunications Network for Data Users.
 - (2) Data Switches for DARCOM/DOD.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics--1981: Recommendation 1B(1).
- 10. Coordination: DARCOM, DCSOPS, and ASA(IL&FM).

FUNCTIONAL AREA: Training

TOPIC: E5 PLL CLERK/PLL TRAINING PACKAGES

RECOMMENDATION NUMBERS: 1F, 1K

STUDY LOCATION (VOLUME-PAGE): 16-51, 16-52

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRU)

1. Reference:

- a. Study of Army Logistics 1981, Section 16, pgs 2, 3.
- b. Change 14, AR 611-201, 1 June 1980, Standards of Grade Authorization.
- c. AR's 600-200, 611-20.
- d. Human Engineering Lab (HEL) Study, Feb 1980.
- 2. Statement of Supporting Recommendations.
 - a. Authorize E5 PLL Clerk; Train Assistant PLL Clerk as added duty.
 - b. Develop exportable PLL Training Packages.
- 3. Rationale for Supporting Recommendations. The Study states that:
- a. E5 PLL Clerk. There is no grade consistency among soldiers occupying this important position. The authorized grade is E4. Most Senior Logisticians contacted during the study process believed the authorized grade is too low.
 - NOTE: There was no rationale for "Training Assistant PLL Clerk as added duty". It appeared to be a result of many factors indicating the criticality of the PLL Clerk's duties.
- b. The study indicates that the training of the PLL Clerk would be enhanced through availability of and easy access to training packages and material (TEC).
- 4. Analysis of Recommendations: These LOG Study recommendations are related to a Feb 1980 Human Engineering Lab (HEL) Study and do not take into account the following:
 - a. Reference 1b created E5 position in TOE Tank Companies, Armored Cav

Troops, Mechanized Infantry Companies, SP Artillery Batteries, and the Headquarters elements of their next higher unit. Since the Log Study was not specific as to why increased grade is required for all units, further study is needed to determine whether other Combat, Combat Support and Combat Service Support units have equally sufficient justification for E-5 PLL clerks as do Tank, Mech, Armored Cav and SP Artillery units. On 24 Mar 82 DCSLOG tasked TRADOC to review the entire CMF 76. This will include a review of the entire grade structure feasibility.

- b. Training an assistant PLL clerk as an additional duty by providing appropriate OJT or school training to the individual has always been a commander's prerogative. This may not change the individual's primary MOS unless reclassification action is taken IAW appropriate ARs.
- c. Exportable Training Packages. At the present time the Quartermaster School has contracted with Hughes Aircraft for production of 27 TEC packets supporting 76C10 MOS both in PLL and TAMMS. The products will be fielded by 1st Quarter FY 83.
- 5. Benefits of Implementation: N/A.
- 6. Resources Required for Implementation: Undetermined.
- 7. Method of Implementation: As reflected in 4a, b and c.
- 8. Relationship to Other Studies: These recommendations are related to those contained in the HEL Study completed in Feb 80 (reference 1d).
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981. These recommendations are not influenced or paced by another recommendation within this study.
- 10. Coordination: TRADOC (ATTG-0), Logistics Center (ATCL-TP), ODCSPER, ODCSLOG and OASA(IL&FM) concur.

TOPIC: PLL

RECOMMENDATION NUMBERS: 1H, 10, 1P, 1Q

STUDY LOCATION (VOLUME-PAGE): 16-52, 16-68, 16-69

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP)

1. Reference:

- a. Study of Army Logistics 1981, Section 16, pages 63-69.
- b. HQDA msg DTG 161833Z Jul 81, subject: Status Reduction.
- c. Status Reduction Conference, Presidio of San Francisco, 29-30 Sep 81.
- d. HQDA msg DTG 262056Z Oct 81, subject: Requisition Follow-up/Supply Status Reduction Procedures.
- 2. Statement of Recommendations:
 - a. "Export Results of SAILS Test"
 - b. "Continue Work on DS4 Programs"
- c. "Modify ARs to reduce/eliminate requirements for units to request status" $\ensuremath{\mathsf{T}}$
- d. "Cease routine provision of status" (Includes the implementation of status reduction actions)
- 3. Rationale for Recommendation: The volume of supply status has grown dramatically over the past several years. Units in the field have complained of receiving unnecessary status and automated supply systems have been adversely affected. The study recommendations are actions designed to reduce these adverse conditions.
- 4. Analysis of Recommendations: The Army's status reduction program includes the recommendations in para 2 above and was implemented by HQDA message on 26 Oct 81 (ref 1d).
- a. "Export Results of SAILS Test" this was accomplished on 29 Sep 81 and served as the baseline for one of three major elements of the status reduction program.
- b. "Continue Work on DS4 Programs" a change is presently being developed in DS4 programs that will reduce the frequency of automated follow-ups generated by DS4. Three systems changes to SAILS ABX have been implemented which reduce the volume of supply status provided to the DS4 system.

- c. "Modify ARs to Reduce/Eliminate Requirement for Units to Request Status" a change to AR 710-2 is currently being written to eliminate mandatory follow-ups at unit level. This change will be implemented 1 April 1982 when the new AR 710-2 becomes effective.
- d. "Cease Routine Provision of Status" this is the cornerstone of the status reduction program. The MACOMs have been directed to implement specific procedures to reduce the volume of routine status. DA ODCSLOG is currently tracking the reduction in supply status volumes. The goal is to reduce the volume of supply status generated by the wholesale system by 50 percent or nearly 1,000,000 transactions per month. Additional reductions will be generated by selected status transactions being suppressed at the theater/corps/installation SAILS ABX activities.
- 5. Benefits of Implementation: While the benefits cannot be quantified in terms of dollars, numerous benefits will occur.
 - a. Reduced workload at the PLL clerk level.
 - b. Reduced runtimes in automated supply systems.
 - c. Reduced workload on supply managers/personnel at all levels.
- $\mbox{d.}$ Reduced volume of transactions passing through the communications systems.
- e. Reduced volume of transactions to be maintained on various systems files.
- 6. Resources Required for Implementation: The recommendations have been implemented with existing resources.
- 7. Method of Implementation: The recommendations in para 2 above were implemented by DA message at ref 1d.
- 8. Relationship to Other Studies: These recommendations are not related to other studies.
- 9. Relationship to Other Recommendations Within the Log-81 Study: These recommendations are related to recommendation #1. They are not paced or influenced by recommendation #1, but implement specific actions that support the overall accomplishment of recommendation #1.
- 10. Coordination: FORSCOM, TRADOC, HSC, USAREUR, EUSA, USARJ, WESTCOM, DARCOM, CNGB, LOGC, USACC, USASAC, DAASO, USAMMA, USACSCSGL, USALEA concur.

FUNCTIONAL AREA: Training

TOPIC: PLL

RECOMMENDATION NUMBER: 1I

STUDY LOCATION (VOLUME-PAGE): 16-52

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRI)

- 1. Reference: Study of Army Logistics 1981, Section 16, pages 13 and 14.
- 2. Statement of Recommendation: "Train Motor Sergeants and Battalion Maintenance Technicians in PLL (Prescribed Load List) Supply Operations".
- 3. Rationale for Recommendation: During interviews with thirty-four (34) Motor Sergeants, career management field (CMF) 63, and thirteen (13) Unit Maintenance Technicians (62A series, Engineer), it was learned that over one-half had not received formal training in repair parts supply procedures.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing.
- a. Motor Sergeant: The maintenance CMF (63) was recently revised to align specialty tracks with weapon systems. Simultaneously, the Noncommissioned Officer Education System (NCOES) for CMF 63 was developed. Full implementation of NCOES for CMF 63 in FY 84, as shown at TAB A, will prepare motor sergeants for repair parts supply supervisory duties. An exportable Motor Sergeant Technical course was fielded in Feb 82 to supplement the formal training program. This course contains approximately 18 hours on PLL and several additional hours on supply and maintenance management.
- b. Warrant Officers (WO): There are two mechanical maintenance WO career fields: (1) Engineer Equipment Repair (62 series) and (2) Automotive Repair (63 series). Training in repair parts supply procedures is provided in both career fields at the Basic (entry) and Advanced Course levels, TAB B. In the past, all new WO accessions were not provided basic (entry) level training. Effective FY 82 procedures were established to enable all new accessions to attend their respective basic courses. Advanced training is normally received between the third to eleventh year of service.
- 5. Benefit of Implementation: With the full implementation of NCOES for CMF 63, FY 84 and the policy for training of all new WO accessions, the recommendation will be satisfied.
- 6. Coordination: TRADOC, MILPERCEN, US Army Logistical Center, US Army Engineer School, US Army Ordnance School, and ODCSLOG concur.

CMF 63 NCOES IMPLEMENTATION PLAN

COURSE	GRADE LEVEL	IMPLEMENTATION	DATE	HOURS*
Advanced NCO Crs	E-6(P), $E-7$	78		Supply/Maintenance
Basic Technical Cr	s E6			30(9)
CMF 63D 63T 63H 63B 63J 63E 63N		FY 80 FY 80 FY 82 FY 83 FY 83 FY 83		
Primary Technical	Crs E5			
63B, 63E, and 63Y, 63T, and		FY 83 FY 84		15(9)

^{*}Total hours in Program of Instruction for Supply and Maintenance Management number in parenthesis is for PLL procedures.

WARRANT OFFICER

TRAINING

PROGRAM OF INSTRUCTION (POI)

	PLL Supply I	I HOURS Manageme	nt	Maintenance	Management
(1)Engineer Equipment	Repair (62A))			
Basic Course		19	11		31

Advanced Course: Merges with Automotive Repair Advanced Course for core curriculum.

(2) Automotive Repair (63A)

Basic Course (16 Weeks)	25	19	46
Advanced Course (17 Weeks)1,2	22	25	40

⁽¹⁾ Training hours contained in core curriculum.

⁽²⁾POI currently being revised with increased emphasis on supply management training. New POI is to be implemented 1st Qtr FY 83.

TOPIC: PLL CLERK

RECOMMENDATION NUMBER: 1N

STUDY LOCATION (VOLUME-PAGE): 16-53

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MPA-CS)

- 1. Reference: Study of Army Logistics--1981, Section 16, Page 53.
- 2. Statement of Recommendation: "Change the career field for the PLL Clerk from CMF 76 to CMF 63."
- 3. Rationale for Recommendation: Rationale to support moving the PLL Clerk (who performs essentially supply functions) into CMF 63 is not provided in the study.
- 4. Status of Analysis of Recommendation:
 - a. The following ongoing initiatives relate to the recommendation:
- (1) HQDA DCSLOG Supply and Maintenance Assessment Review Team (SMART) has initiated action to investigate methods to simplify TAMMS forms and PLL. During the next 120 days, the 24th Infantry Division at Fort Stewart will test initiatives to streamline PLL procedures.
- (2) HQ TRADOC has been tasked by DCSLOG to conduct a comprehensive review of CMF 76. Review and assessment will be performed by the Quartermaster School. Results are not anticipated before Dec 82.
- (3) The US Army Ordnance Center and School is currently conducting a complete review of CMF 63.
 - b. Projected completion date of assessment: 2nd Qtr, FY 83.
- c. Preliminary findings, if any: A decision on changing the CMF of PLL clerks should be deferred pending completion of the related initiatives.
- 5. Relationship to other studies: None.
- 6. Relationship to other Recommendations within the Study of Army Logistics--1981: It is related to all other sub-recommendations within Recommendation Number 1, which states, "Develop a simple, standardized, automated unit repair parts supply system." However, development of other sub-recommendations is not contingent on approval of this issue.
- 7. Coordination: ODCSLOG, ASA(IL&FM), TRADOC, and LOGCEN concur.

TOPIC: DATA BASE MANAGEMENT SYSTEM

RECOMMENDATION NUMBER: 1R

STUDY LOCATION (VOLUME-PAGE): 16-69

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference:

a. Study of Army Logistics - 1981, Section 16, page 69.

- b. Automation of Wartime Functional Supply Requirements (AWFSR) Study, January 1980.
- 2. Recommendation: "Redesign current system to a data base management system."
- 3. Rationale for Recommendation: Data base management systems vastly improve transaction processing time, reduce the need to create input cards, tapes, or disks, and facilitate distributive processing. The problems of protracted system run times, slow response to queries, and cyclical fixed format output are eliminated with data base management systems.
- 4. Analysis of Recommendation: Recommendation will be accommodated by actions planned for future implementation.
- a. Current Automated Supply Systems operating in a retail CONUS BASOPS environment are to be converted to operate on new computers procured under Project VIABLE. Software Support Packages to be procured along with those computers provide data base management routines.
- b. Current Systems will initially be converted to operate as they do currently except for some additional limited interactivity. Logistics automation planning guidance, currently under development, will reflect the requirement to either redesign those systems to take advantage of the new data base management capabilities or to replace those systems with new systems having those capabilities.
- c. Selected wholesale level systems are also being redesigned to operate on a distributed processing concept.
- d. Planning guidance specifying the ODCSLOG objectives and subobjectives providing direction to MACOMs involved in standard system design is targeted for completion in second quarter FY 82.

- 5. Benefits of Implementation: Design of the system around a data base management concept will allow more timely processing of information and provide more accurate and reliable information to users.
- 6. Resources Required for Implementation: Resources required are unknown at this time. The centralized design centers will be directed to estimate resources required to implement the automation objectives/subobjectives. The requirement for resources will be dispersed over the next ten years and must be identified during the Programing and Budget cycle. Shortfall will be identified with each submission.
- 7. Method of Implementation: Must be accomplished by the centralized design centers as part of the life cycle management of each supply system.
- 8. Relationship to Other Studies: This recommendation parallels findings in the Automation of Wartime Functional Supply Requirements Study (AWFSR) for retail supply systems.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is closely related to the recommendation to design future systems to allow for distributive data bases. Based upon timing and resources both recommendations might be accomplished by the same set of actions.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC concur.

TOPIC: DISTRIBUTED DATA BASES

RECOMMENDATION NUMBER: 1S

STUDY LOCATION (VOLUME-PAGE): 16-69

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference:

a. Study of Army Logistics - 1981, Section 16, page 69.

- b. Automation of Wartime Functional Supply Requirements (AWFSR) Study, January 1980.
- 2. Recommendation: "Design future systems to allow for Distributive Data Bases under a data base management concept." (Includes providing communications to allow system-to-system inquiry)
- 3. Rationale for Recommendation: Distributed data bases designed to use data base management concepts will improve survivability through redundant processing capability and will improve system processing speed. Distributed data bases linked together in a communications network can be designed to transfer information from one system to another automatically, share workload among network computers, and, if one computer is lost, others in the networks can quickly assume the lost computer's workload.

4. Analysis of Recommendation:

- a. Designing future supply systems around a distributive data base concept was recommended and approved by the Automation of Wartime Functional Supply Requirements Study.
- b. As a result, the Design Center and HQDA concept for the new Standard Army Retail Supply System (SARSS) is for a distributive data base system.
- c. The ODCSLOG Automation Master Plan will extend this objective to the design of future automated systems in the other functional areas of logistics.
- 5. Benefits of Implementation: Design of future systems around a distributed data base concept will provide the flexibility needed to insure that logistic systems are survivable and sustainable as well as more efficient.

- 6. Resources Required for Implementation: Resources estimated for SARSS alone require a minimum of approximately 40 personnel. Since these resources are not programed until FY 85, ODCSLOG has identified the issue as an unfinanced requirement in FY 82 and FY 83, and is attempting to program FY 84 resources in the FY 84-88 POM. Design of future systems using the data base management concept will increase the communications shortfall. The specific communications requirements will be identified during the developmental process. The resources for other functional areas will be determined on a case by case basis and programed accordingly. However, a continual shortfall of resources can be anticipated since automated logistics systems habitually are lower in priority than many other Army requirements.
- 7. Method of Implementation: The DA Staff will insure, through provision of automation guidance and review of systems development documentation, that new systems are designed with the flexibility and efficiency provided by the distributed data base concept.
- 8. Relationship to Other Studies: This concept was recommended by the Automation of Wartime Functional Supply Requirements Study (AWFSR). The recommendation was approved for the automated Supply System to replace SAILS at Corps/theater.
- 9. Relationship to Other Recommendations Within Log-81 Study: Closely tied to, and should be worked with, the recommendation to redesign current system for data base management concept. In addition, this recommendation implies that communications requirements to link the distributed data bases must be identified and accommodated. Those requirements are identified as a required section in system development documentation and are addressed for battlefield systems in the updated Army Command and Control Master Plan (AC2MP) and the Automation and Communication Transition Plan.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC concur.

TOPIC: PLL

RECOMMENDATION NUMBER: 1T

STUDY LOCATION (VOLUME-PAGE): 16-69

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP)

1. Reference:

a. Study of Army Logistics - 1981, Section 16, pages 76-84.

- b. Army Standardized Combat PLL/ASL Program decision briefing to VCSA, 3 June 1981.
- 2. Statement of Recommendation: "Continue Combat Prescribed Load List (PLL) Program."
- 3. Rationale for Recommendation: The study states that Combat PLL/ASL program has potential for high payoff to the Army in terms of increasing Army readiness.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. VCSA approved continuation of the program at decision briefing 3 June 1981 (reference 1b).
- b. Combat PLLs have been developed for a Mechanized Infantry Company and a Tank Company. Combat PLLs for all other units in an Armored and Mechanized Infantry Division will be completed during FY 82.
- c. Combat Authorized Stockage Lists (ASL) will provide backup stockage to unit PLLs. An armored division combat ASL will be computed by the end of FY 82. Other combat ASLs will be computed during FY 82.
- 5. Benefits of Implementation: Current repair parts stockage levels are based upon peacetime demand rates. These rates do not consider the increased wearout and loss of parts expected from combat usage and combat damage. The combat PLL/ASL Program corrects this problem and insures that Army units will have repair parts needed to sustain combat operation.
- 6. Resources Required for Implementation: The additional repair parts needed to stock combat PLLs will cost approximately \$5,000 per company size unit. The FY 82 Budget includes \$7.9 million for mechanized infantry and tank companies. Through FY 87, \$57 million is programed to complete the PLLs. Funding requirements for combat ASLs are being developed for FY 84 through FY 87.

- 7. Method of Implementation: DA Circular 700-81-2, 1 October 1981, implements program. Office of primary responsibility is ODCSLOG. General Officer In-Process Reviews (IPR) are chaired by Director, Supply and Maintenance. Next IPR is scheduled for 21 January 1982.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is not influenced or paced by other recommendations. This recommendation complements other recommendations for simplifying the PLL procedures.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC, and Army Logistics Assessment Office concur.

TOPIC: FORWARD SUPPORT MAINTENANCE

RECOMMENDATION NUMBERS: 2, 2A, 2B, 2C, 2D, 2E, 2F

STUDY LOCATION (VOLUME-PAGE): 17-52, 17-104

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics 1981, Annex D, Section 17, pages 17-53.
- b. Draft TRADOC Pamphlet Number 525-XX, 1 Oct 81, Military Operations Forward Support Maintenance.
- 2. Statement of Recommendations:
- a. "That the US Army retain fix-forward as an orientation for maintenance support.
- b. That the need for improvements in battlefield recovery (density, capability) be recognized as a dependent factor in fix-forward doctrine.
- c. That maintenance doctrine for the air/land battlefield, work in the MOPP ensemble, and decontamination equipment and procedures be improved.
 - d. That fix-forward doctrine be clarified as to its limitations.
 - e. That end item repair be performed as far forward as possible."
- 3. Rationale for Recommendation: Forward support maintenance has been a principle of maintenance for many years. Doctrine, structure, and logistics support planning have not adequately embraced the forward support concept. The basic unit of "fix forward" or forward support maintenance is to maximize combat time by minimizing repair and evacuation time.
- 4. Analysis of Recommendation: The recommendation is being accomplished.

- a. Maintenance support concepts, doctrine, and procedures have for years contained statements specifying repair of equipment as close to the point of failure as practicable. Also, such documents have stressed that maintenance would be performed at the lowest category of maintenance consistent with the tactical situation and allocations for facilities, skills, time, repair parts, tools, and test equipment. In many cases, it has been easier to send mechanics and parts to a piece of inoperable, large equipment than to move the item to a maintenance shop.
- b. On-site repair and repairing as close to the point of failure generally applied to Direct Support (DS) maintenance units. General Support (GS) maintenance units generally did not go forward to repair except in those cases where they were assigned a direct support mission. GS units normally performed repairs in support of the local Army area supply system.
- c. The "Fix Forward Doctrine", while recognized as not being a new conceptual breakthrough, has led to an evolving formalization of maintenance practices, organization, and equipment with supporting doctrinal changes. The viability of the concept and its inherent flexibility are driven by tactical considerations, weapons systems, and the varying threat considerations.
- d. Fix forward is not a specific location on the battlefield. Prior to a maintenance support team (what we used to call a "contact team") going outside its maintenance area, it must be able to satisfy at least three criteria to effect expeditious and efficient on-site repairs:
- (1) Have a means of transporting the team to its destination from the appropriate level (Organization, Direct Support, or General Support) with tools, test equipment, and parts.
 - (2) Possess reliable and accurate diagnostic capability.
- (3) Have the right quantity and range of repair parts to make the repair.
- e. Once they can satisfy these requirements, the location they go to is dependent on the tactical situation (offense, defense, lull in the fighting, day or night, retrograde) and time and security become extremely important. For example, if a tank is not under direct enemy observation and the battle is moving away from the site, whether the problem is mechanical failure or combat damage, an "on-site" repair may be entirely feasible by organizational mechanics.

- f. Doctrine is being written to embrace this concept. Units at organizational, DS and GS levels are being structured to make it work better.
- 5. Benefits of Implementation: This concept allows for planning, performing and supporting the action of inspecting and maintaining equipment so as to obtain and retain the highest level of material readiness in the most efficient, economical and reliable manner.
- 6. Resources Required for Implementation: This recommendation was done using available resources.

7. Method of Implementation:

- a. Reference 1b above was sent worldwide 4 Mar 82 by HQ TRADOC. This TRADOC pamphlet contains the forward support maintenance (fix-forward) concept and has been approved by the CG TRADOC. Comments are due back to HQ TRADOC 17 May 82. Pertinent comments will be incorporated and the finalized TRADOC pamphlet should be distributed by 31 Aug 82.
- b. In Division and Corps 86, the operational concepts have been published as TRADOC pamphlets in the 525 series. These pamphlets are to be used until doctrinal manuals can be staffed and published. The battle support appendices in those pamphlets stress the use of maintenance teams and maintenance support teams for diagnosis and repair at the best level. The creation of the system mechanic in CMF 63 makes forward diagnosis and decision making (as to whether to repair or recover) a likelihood, rather than a chance possibility.
- c. The organizational development for the Division 86 structure does many things to enable fix forward to work. The Forward Area Support Coordinator has been enlarged into a battalion headquarters. This forward support battalion has a larger forward support company with maintenance support teams structured to the force being supported with mobility (an M113), communications, skills, and tools to formalize the former ad hoc contact teams. In addition, organizational maintenance is centralized at maneuver battalion level for control and efficiency. This element also has mobile maintenance teams structured to the force with communication systems, mechanics, and tools to do the job. There are more recovery vehicles per maneuver brigade, and the heavy division now has a heavy equipment transporter company (HET) with 24 HETs for the evacuation mission.
- d. HQ TRADOC has also recognized the criticality of recovery and evacuation operations on the battlefield. The US Army Ordnance Center and School has been designated the proponent for recovery and evacuation. A Recovery and Evacuation Management Plan developed by the

Ordnance School has been approved and periodic in-process reviews have been held (Dec 81 was last) and are planned. FM 20-22 Recovery/Evacuation Operations, has been revised and will be distributed by 1 Jun 82.

- e. The "Logistics System Survivability in a Chemical Warfare Environment" study, completed Oct 80, was used by the US Army Logistics Center in the formulation of doctrine for operations of Combat Service Support (CSS) forces in a chemical warfare environment. Twenty-six CSS-type units were subjected (computer scenario) to anticipated chemical attacks (weapon, agent, mode of delivery). Units (equipment and personnel) were consequently degraded and weaknesses identified. Recommendations, as a result of this effort, have been incorporated in the CSS Mission Area Analysis II currently being prepared by the Logistics Center.
- 8. Relationship to Other Studies: As indicated in paragraph 7e above, the "Logistics System Survivability in a Chemical Warfare Environment" study has already identified the need for improvements in maintenance doctrine relative to working in a chemical environment. It was used by the Logistics Center to identify the specific needs of CSS units in the areas of doctrine, structure, and equipment for use on a chemical battlefield.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation was not paced by another recommendation within the study.
- 10. Coordination: TRADOC, USALEA, and the ALA Functional Area point of contact for maintenance concur.

FUNCTIONAL AREA: Structure

TOPIC: COMMODITY ORIENTATION

RECOMMENDATION NUMBER: 2G

STUDY LOCATION (VOLUME-PAGE): 17-54 through 17-104

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP)

1. Reference:

- a. Study of Army Logistics 1981, Section 17, pages 54-104.
- b. Final Report, Restructured General Support (RGS), Feb 79.
- 2. Statement of Recommendation: "That GS maintenance units in EAC be restructured for commodity orientation against their requirement to support the supply system and not as fix-forward units."
- 3. Rationale for Recommendation: A commodity orientation to achieve weapons systems support by the massing of technical expertise is the best approach to general support maintenance.

4. Analysis of Recommendation:

- a. Under the VMAP and three levels of maintenance concept GS units will not be employed in fix-forward missions. Organizations structured in a commodity oriented fashion were in the Restructured General Support concept which would have been implemented in the Corps and EAC. Those RGS units also included forward support elements. A recently completed unit-by-unit analysis to determine the cost of converting to RGS demonstrated that RGS was too costly (\$444.8M), and would cause too much turbulence in the RC, and did not have MACOM backing. However, ODCSLOG is now actively pursuing alternatives to RGS that will achieve some degree of commodity orientation in a less turbulent manner, will support Division 86 force modernization initiatives, and will start the evolutionary process of providing maintenance in support of the AirLand Battle concept.
- b. As part of the evolving concept for three levels of maintenance currently being developed by ODCSLOG, GS units will be assigned to EAC as opposed to current location in Corps area with missions and functions to support the supply system. Fix-forward missions will be assigned solely to intermediate (DS) level units employed forward of EAC.

- 5. Benefits of Implementation: There should be an increase in operational availability of weapon systems under the commodity oriented concept. However, actual benefits cannot be quantified until the GS maintenance alternative is fully developed.
- 6. Resources Required for Implementation: To be determined.
- 7. Method of Implementation: None.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is related to Recommendation 3.
- 10. Coordination: ODCSOPS, TRADOC, and OASA(IL&FM) concur with the recommendation.

TOPIC: MOBILITY FOR DS MAINTENANCE UNITS

RECOMMENDATION NUMBER: 2H

STUDY LOCATION (VOLUME-PAGE): 17-104

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics 1981, Annex D, Section 17, pages 17-104.
- b. US Army Ordnance School briefing: Emerging Logistics Doctrine for the Battlefield in 1980's.
- 2. Statement of Recommendation: "Augment DS Maintenance Units and provide them more mobility."
- 3. Rationale for Recommendation: During the development of the support concepts for the Div 86/Army 90, it was determined that maintenance units must have the capability to repair damaged items of equipment as far forward on the battlefield as practicable. Although forward support maintenance has been a maintenance principle for many years, in many cases it was done on an unstructured, ad hoc basis.
- 4. Analysis of Recommendation: The recommendation is being accomplished.
- a. This particular recommendation is tied closely to the Forward Support Maintenance Doctrine recommendation. The doctrine, to enable this concept to work, has been written and "forward support" has been retained as an orientation for maintenance support.
- b. The emerging force structure for Direct Support (DS) maintenance units was designed to provide tailorable, more mobile maintenance support teams.
- 5. Benefits of Implementation: This concept provides the Army with maintenance support that will enhance the ability to maintain maximum operational readiness by minimizing repair and evacuation time.
- 6. Resources Required for Implementation: This recommendation was implemented using available resources.

7. Method of Implementation:

- a. In Division and Corps 86, the operational support concepts have been published as TRADOC pamphlets in the 525 series. These pamphlets are to be used until doctrinal manuals can be staffed and published. The battle support appendices in those pamphlets stress the use of maintenance teams and maintenance support teams for diagnosis and repair at the best level. The creation of the system mechanic in CMF 63 makes forward diagnosis and decision making (as to whether to repair or recover) a likelihood, rather than a chance possiblity.
- b. The draft plan TOEs (DPTOEs) for Div 86 maintenance units have been developed. This structure makes DS maintenance units tailorable and more mobile and structured to give them the tools and flexibility to effect on-site repairs where practicable. The DPTOEs have been reviewed by Task Force 86 at Ft Leavenworth and comments provided TRADOC. The revised DPTOEs will be provided HQDA through HQ TRADOC in June 1982.
- 8. Relationship to Other Studies: There is no relationship to other studies.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics-1981: The Forward Support Maintenance ("Fix Forward") recommendation is tied to this recommendation as outlined in paragraph 4 above. Additionally, the Corps area maintenance units will be influenced by the results of the HQ TRADOC analysis of the General Support (GS) maintenance recommendation (Annex, D Log 81 Study, pages 17-104). This analysis is due to HQDA Dec 82.
- 10. Coordination: TRADOC, USALEA, and the ALA Functional Area point of contact for maintenance concur.

TOPIC: LOCATION, GS MAINTENANCE

RECOMMENDATION NUMBER: 3

STUDY LOCATION (VOLUME-PAGE): 17-60 through 17-77

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP)

- a. Study of Army Logistics 1981, Section 17, pages 60-77.
- b. Letter, HQDA, DALO-PLF, 28 Dec 81, subject: Study of Army Logistics 1981.
- 2. Statement of Recommendation: "That the function of GS Maintenance component repair be moved from the Corps to EAC."
- 3. Rationale for Recommendation: A GSU located in a fixed facility in EAC has at least 23.3% more productive time than a GSU in the Corps.
- 4. Status of Analysis of Recommendation:
- a. Concur in the recommendation. This recommendation will be accomplished through the realignment of GS functions and missions and the movement of traditional GS units to EAC under the evolving three level maintenance concept.
- b. Further analysis of this recommendation will be included in our effort to develop alternatives to the Restructured General Support (RGS) maintenance concept. The alternatives under study will achieve commodity orientation in a less turbulent manner, support Division 86 initiatives, and will start the evolutionary process of providing maintenance under the Air Land Battle concept.
- 5. Benefits of Implementation: Productivity is increased when component repair is conducted in relatively fixed facilities. Battlefield clutter and force structure requirements are reduced.
- 6. Resources Required for Implementation: None. It is felt that adoption of this recommendation will result in a net reduction in the number of maintenance personnel required. This may be offset by an increased requirement for transportation assets to haul serviceables and unserviceables to and from EAC.

- 7. Method of Implementation: The recommendation is approved for implementation, TRADOC must now develop new TOEs and Program Decision Increment Packages (PDIP) will be written for inclusion in the POM.
- 8. Relationship to Other Studies: GS component repair at EAC vice the Corps was approved in EAC concepts and is doctrine in FM 100-16.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is related to Recommendation Number 2G.
- 10. Coordination: TRADOC and OASA(IL&FM) concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: TMDE PROGRAM

RECOMMENDATION NUMBERS: 4, 4C

STUDY LOCATION (VOLUME-PAGE): 17-146

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-C4P)

1. Reference:

a. Study of Army Logistics - 1981, Annex D, Section 17, pages 106-146.

- b. HQDA, Post Deployment Software Support (PDSS) Concept Plan for Battlefield Automated Systems (BAS), May 1980, Interim Approval 5 May 1981.
- c. DA Directed Program Development Increment Package (PDIP) 11 PDSS Centers (FY 84-88 PBC Cycle).
- d. Department of the Army Test Measurement and Diagnostic Equipment (TMDE) Action Team, Final Report (Draft).
- 2. Statement of Recommendation: "Define and Upgrade Army TMDE Program, Plan to Resource Requirements for Post-Deployment Software."
- 3. Rationale for Recommendation: The study addressed the fact that the PDSS concept would provide for the TMDE of automated systems software, which is accomplished through Test Program Sets (TPS). The proper funding of PDSS has a direct bearing on the outcome of the TPS support for all embedded BAS to be fielded through the 1985 timeframe.
- 4. Analysis of Recommendation: Implementation of the Recommendation is ongoing and will continue.
- a. Three initiatives to acquire the proper resourcing for PDSS are ongoing.
- (1) The Army Modernization Information Memorandum and Modernization Resource Information System (AMIM/MRIS) has been revised to require BAS specific PDSS resource identification.
- (2) The Army Automation Planning, Programing and Evaluation System (AAPPES) has been revised to capture the PDSS resources which are not found in the AMIM/MRIS area.
- (3) A DA directed PDIP has been developed to provide resources for the start-up and management costs associated with the Concept Plan's 11 PDSS Centers. Those Centers would be the host site for PDSS to be performed on the functionally distributed BAS as they were fielded.

- b. TPS are included within the PDSS Plan as a proposed responsibility pending the outcome of the DA TMDE Action Team Report.
- 5. Benefits of Implementation: The creation of the 11 PDSS Centers will provide the host sites for not only the PDSS of the coming BAS but are also intended to provide the sites for the TPS (software TMDE) PDSS. This is a critical support concept.
- 6. Resources Required for Implementation: The AMIM/MRIS and AAPPES submissions have identified the system specific PDSS costs which will be subsumed by the PDSS Centers upon their creation and the fielding of the BAS. The DA Directed PDIP, #DA4A, will provide for the start-up and management costs of the 11 Centers.
- 7. Method of Implementation: Once the PDSS Centers are in existence and the specific BAS have become the responsibility of the respective Center, the applicable PDSS resource requirements will be transferred from the BAS Program line to the applicable MACOM's budget. This resourcing would then become a cost of doing business in the fielding of that system.
- 8. Relationship to Other Studies: The only study involved is the In-Theater PDSS Study which is a unique effort, the results of which will be incorporated into the HQDA, PDSS Concept Plan, upon completion.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: The outcome of this recommendation will receive input from the results of recommendation #36.
- 10. Coordination: ODCSLOG, ODCSRDA, TRADOC, and DARCOM concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: EQUATE

RECOMMENDATION NUMBER: 4A

STUDY LOCATION (VOLUME-PAGE): 17-146

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMC)

1. Reference Study of Army Logistics-1981, Section 17, pages 17-129 through 17-134 and page 17-146.

- 2. Statement of Recommendation: "Move the EQUATE system from the Corps Support Command to Echelons Above Corps (EAC). Do not plan for repair of printed circuit boards in the corps area."
- 3. Rationale for Recommendation: Based on the peculiar technical skills, support equipment, repair parts and test program set (TPS) requirements associated with printed circuit board (PCB) repair, the study recommends removal of this mission from the corps. The study indicates required resources, specifically the EQUATE system (AN/MSM-105(V)2) would be better utilized at EAC. Moving the mission to EAC is also cited as a factor in reducing battlefield clutter.
- 4. Status of Analysis of Recommendation:
 - a. Ongoing actions to assess recommendation:
- (1) An ODCSLOG proposed policy for ATE employment and maintenance of PCB's, line replaceable units (LRU's) and like items is being finalized now. The policy permits tailoring of the four categories of maintenance (e.g., use of three vice four) and alteration of the geographic location of support on the battlefield (i.e., Division, Corps and EAC) when quantifiable readiness and life cycle cost benefits will be realized. Use of this policy is applicable to EQUATE; however, no formal Cost and Operational Effectiveness Analysis (COEA) has previously been conducted on this system.
- (2) The EQUATE COEA issue arose during the DATAT Army-wide assessment of test, measurement and diagnostic equipment (TMDE). TRADOC was tasked in February 1982 to conduct a formal cost and readiness analysis. The issue remained unresolved upon completion of the DATAT assessment in March 1982.
- (3) TRADOC has taken action to expand an existing contract with BDM Corporation (Automatic Data Processing Equipment (ADPE) Maintenance Study) to develop data on PCB repair using the AN/MSM-105(V)2. Though not as comprehensive as a formal COEA, TRADOC (Signal Center) indicates the study would specifically address whether PCB repair using the AN/MSM-105(V)2 can best be accomplished at the General Support in corps, EAC or at depot/contractor facilities. Pending approval of contract extension, the Signal Center projects final study results in July 1983 with interim data tentatively available in February/March 1983.

- (4) Based on DSARC review of ATE planned for the Division Air Defense (DIVAD) Gun System and the Advanced Assault Helicopter (AAH), the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) has requested a 90 day joint review of Army ATE options to determine optimum development and fielding strategies. Tentatively slated to commence in October 1982, preliminary briefings and analyses will be provided in the interim. Additionally, as a result of repeated Under Secretary of the Army queries for definitive cost/readiness data on the EQUATE system, the ODCSOPS, in concert with the ongoing ODCSLOG effort, has tasked TRADOC to collect and analyze these data on AAH and DIVAD to determine if an extrapolation base exists for other systems.
- (5) The AN/MSM-105(V)2 will undergo operational testing (OT-III) at Fort Hood, Texas from July through November 1982. The test will determine whether or not the system is type classified standard and will be a primary factor in the final decision to initially field it at corps or EAC.
- b. Projected completion date of assessment: July 1983 (results of COEA). Earlier termination may be achieved as other initiatives mature.

c. Preliminary findings:

- (1) The ODCSLOG proposed policy for ATE employment will resolve the question of where PCB's, LRU's and like items are repaired. Under the policy, repair is predicated on case-by-case determination of readiness and life cycle cost factors and not on hardware deployment (i.e., EQUATE).
- (2) Formal determination of readiness and life cycle cost implications of PCB/LRU repair using the AN/MSM-105(V)2 is essential for fielding of the EQUATE system.
- 5. Relationship to other studies: This recommendation has no relationship with any known study, other than those cited.
- 6. Relationship to other recommendations within the Study of Army Logistics-1981: This recommendation is directly related to recommendation 4B -need for consistent level of repair methodology for electronic components and 4D emphasize research and development thrust to improve reliability of ATE and Built-In-Test Equipment (BITE). Recommendations 4B and D are accommodated by the ODCSLOG proposed policy for employment of ATE and maintenance of PCB's, LRU's and like items.
- 7. Coordination: This status has been coordinated with the Assistant Secretary of the Army (Installations, Logistics and Financial Management), ODCSOPS, ODCSRDA and DARCOM.

TOPIC: MAINTENANCE POLICY

RECOMMENDATION NUMBER: 4B

STUDY LOCATION (VOLUME-PAGE): 17-146

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMC)

1. Reference Study of Army Logistics-1981, Section 17, page 17-146.

- 2. Statement of Recommendation: "Develop a consistent level of repair methodology for electronic components that considers force structure, manpower, fiscal and tactical constraints."
- 3. Rationale for Recommendation: Maintenance policy for printed circuit boards (PCB's) and line replaceable units (LRU's), at the time of the study, did not effectively pace the dynamics of electronic technology. As a result, hardware development was frequently not supportable with effective policy.
- 4. Analysis of Recommendation:
- a. The complexity of electronic technology and the growth in application of PCB's/LRU's in new equipment precludes dictating repair at a single maintenance category or geographic location. Flexibility is required to permit tailoring of support to achieve and maintain requisite readiness with available resources at the lowest life cycle costs.
- b. The four categories of maintenance currently provide the baseline for support of all Army materiel. However, a review is underway to determine the optimum configuration of a three category baseline support concept.
- c. A maintenance policy for PCB's, LRU's and like items was developed by the ODCSLOG for inclusion in AR 750-1 (Maintenance of Supplies and Equipment). Staffed in December 1981, field comments were combined with information developed during the Army-wide assessment of TMDE functions. The policy was subsequently expanded to address employment of Automatic Test Equipment (ATE). Also, additional flexibility was provided the Combat and Materiel Developers to tailor the four categories of maintenance and alter geographic location of support on the battlefleld (i.e, Division, Corps or Echelons Above Corps). Transmitted worldwide for final comment in May 1982, input is being consolidated/analyzed now.
- 5. Benefits of Implementation: The proposed maintenance and ATE employment policy will:
- a. Improve support of new equipment by requiring development of hardware and software maintenance concepts which can be accommodated with existing and projected logistical resources.
- b. Accommodate tailoring of the categories of maintenance and location of support on the battlefield.

- c. Encourage use of non-developmental items and development of support procedures to address combat sustainability of this material.
- d. Establish consideration of discard-at-failure as an alternative to repair for PCB's, LRU's and like items.
- 6. Resources Required for Implementation: The proposed policy can be implemented with available resources.
- 7. Method of Implementation: Incorporate into AR 750-1.
- 8. Relationship to other studies: While ATE employment and maintenance of PCB's, LRU's and like items are areas of ongoing assessment, implementation of the ODCSLOG proposed policy is not influenced by any known study.
- 9. Relationship to Other Recommendations within the Study of Army Logistics-1981: This recommendation is related to number 4A (placement of EQUATE at Echelonn Above Corps and no planned repair of PCB's in corps). The proposed ATE employment/maintenance policy establishes readiness and life cycle cost benefits as the parameters for determining where PCB's are repaired (with associated ATE).
- 10. Coordination: ODCSOPS, ODCSRDA, and TRADOC concur with the proposed policy. DARCOM recommends permanent adoption of three categories of maintenance as a baseline for repair of electronics. We're analyzing DARCOM's input now for incorporation as appropriate.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: AUTOMATIC TEST EQUIPMENT/BUILT-IN TEST EQUIPMENT

RECOMMENDATION NUMBER: 4D

STUDY LOCATION (VOLUME-PAGE): 17-106 to 17-146

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-CS)

- a. Study of Army Logistics 1981, Annex D, Section 17, pages 106-146.
- b. DA Test, Measurement and Diagnostic Equipment (TMDE) Action Team (DATAT) Final Report, Chapter 1 (Automatic Test Equipment ATE), 27 April 1982.
 - c. Draft revision of AR 750-43 (TMDE), 23 April 1982.
 - d. Letter, DRCSM-T, 26 April 1982, Automatic Test Equipment (ATE).
 - e. Draft Test Program Set (TPS) Management Plan, May 1982.
- 3. Rationale for Recommendation: Log Study-81 concluded that ATE and BITE can greatly simplify maintenance tasks for complex systems. Concerns associated with this recommendation include:
- a. Army TMDE inventory needs to be modernized via an $\varepsilon \text{ffective Army TMDE}$ Modernization Program.
- b. STE-X needs to be developed for use at operational level maintenance. This effort should result in reduced diagnostic times, equipment publications, and connectors when compared with existing STE (e.g., STE-M1/FVS; STE-M1; STE-FVS; STE-ICE).
- c. A Direct Support (DS) ATE standard needs to be developed (i.e, Direct Support Automatic Test Support System (DS-ATSS)).
- d. Additional emphasis needs to be placed on standardized use of the AN/USM-410 at General Support (GS).
 - e. TPS management needs to be defined and executed.
- f. ATE use at division and nondivision Aviation Intermediate Maintenance (AVIM) needs to be defined and executed.

- ${\tt g.}$ Effective use of ATE and BITE requires availability of skilled operators, repair parts, and TPS.
- h. Log Study-81 indicated that ATE and BITE fault isolation and/or detection goal of 90 percent was not being achieved on PATRIOT (30 percent) and TACFIRE (46 percent).
- 4. Analysis of Recommendation: The Log Study-81 recommendation 4D is indorsed. The need for R&D emphasis on ATE and BITE is essential due to increased materiel system complexity. In support of this need, and to reduce concerns cited in paragraph 3 above, the following actions have been undertaken:
- a. The CECOM TMDE Modernization Program is in process of being converted into an Army TMDE Program.
- b. A draft AR 750-43 revision (Ref 1C) has been distributed which addresses ATE and BITE requirements.
- c. STE-X and DS-ATSS will receive management emphasis by the new Army Executive Director for TMDE.
- d. A draft update to the December 1979 Single ATE Policy (Ref 1D) has been distributed which addresses AN/USM-410 standardization, policy waiver procedure, and AVIM ATE use.
- e. An Army TPS Task Force has been established to develop a TPS Management Plan (Ref 1e). The task force will be converted into a chartered Army TPS Managers Action Committee to address TPS issues via formal workgroups and to update the TPS Management Plan as necessary.
- f. DRCPM-ATSS and TSM-ATSS have dedicated ongoing efforts to assure repair parts and skilled operators are available to support general purpose ATE operation. BITE repair parts and training are the responsibility of the materiel developer having proponency for the supported materiel system.
- g. BITE is being integrated into the design of emerging material systems. This integration will increase since the revised AR 750-43 will require integration of valid BITE attributes in material system design.
- $h.\ STE-X$ and DS-ATSS acquisition are being accomplished based on specific acquisition strategies.
- 5. Benefits of Implementation: It should be noted that present Army TMDE policy has provided high priority to built-in and automatic test equipment. However, the recommendation will further support the following:
- a. Materiel systems will be designed to have self test (BITE) capability as based on documented engineering analyses. These analyses must include trade-offs between design/physical attributes and logistic gains which could be realized by BITE use.

- b. Development and fielding of STE-X, DS-ATSS, and/or other reliable ATE. These ATE will lessen user maintenance burdens if trained personnel and forward area repair part stockage are effectively utilized.
- 6. Resources Required for Implementation:
- a. ATE and TMDE acquisition and fielding will be planned, funded, and consistent with established Army material system acquisition regulatory guidance (AR 1000-1; AR 700-127). The revised AR 750-43 will substantiate this requirement.
- b. To achieve effective in-house (organic) TMDE and ATE (DS-ATSS; STE-X) management, additional funding and personnel are required:
- (1) Resources to support the revised Army TMDE Program (i.e., Executive Director for TMDE) will be submitted to HQDA when established and verified.
- (2) Resources for TPS management will be identified and justified to HQDA in 4Q FY 82 as a part of the TPS Management Plan. Methodology (e.g., PDIP) to be used for formally requesting TPS management resources will be established at a later date when resource requirements have been received from impacted activities.
- c. BITE will be funded as an integral part of the supported material system acquisition program. The revised AR 750-43 will substantiate this requirement.
- 7. Influences of Other Studies: Log Study-81 was an original study which was based on available data (e.g., previous HQ DARCOM TFS data collection efforts), materiel system program reviews, and personal interviews. Neither the Log Study-81 nor the subject recommendation was directly paced or influenced by another study recommendation. Rather, the above recommendation was the result of a composite effort which addressed several data/information sources. (NOTE: Log Study-81 does advance the suggestion that the AN/USM-410 should only be used at Echelon Above Corps (EAC). This suggestion in itself paces the need for an R&D thrust on ATE and BITE).
- 8. Relationship to other Recommendations within the Study of Army Logistics--1981. This recommendation is directly related to recommendation 4A and 4B. The degree of R&D necessary to improve ATE and BITE is relative to the policies for the geographic location of ATE in the field and the repair methodology for electronic components.
- 9. Coordination: This has been coordinated with the OASA(RDA), ODCSOPS and ODCSLOG.

TOPIC: LEVELS OF MAINTENANCE

RECOMMENDATION NUMBER: 5

STUDY LOCATION (VOLUME-PAGE): 17-104

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics 1981, Annex D, Section 17, page 17-104.
- b. US Army Logistics Evaluation Agency (LEA) Study: "Levels of Maintenance," April 1981.
- c. DALO-SMP-U message 301245Z Sep 81, subject: Categories of Maintenance.
- d. DALO-ZA letter dated 27 Sep 82, subject: Modernization of the Army Maintenance System.
- 2. Statement of Recommendation: "That the following maintenance concept be adopted:
 - a. Four levels of maintenance as baseline
- b. Three levels for selected, appropriate commodities of ground equipment."
- 3. Rationale for Recommendation: The type of equipment and density are discriminators for the number of levels of maintenance. The physical attributes of equipment, degree of complexity, and mission contribute to selection of levels and types of maintenance to be performed.
- 4. Analysis of Recommendation: The recommendation has been implemented, but is under revision to adjust the baseline to three categories.
- a. Adherence to a rigid system of fixed levels/categories of maintenance fails to give proper recognition to:
 - (1) Equipment characteristics.
 - (2) Maintenance principles.
 - (3) Command and control requirements.
 - (4) Wartime scenarios.
- b. There is no identifiable "best" or "proper" number of maintenance levels/categories.

- c. The present categories system is the current base from which to tailor maintenance systems for specific commodities or commands. Aviation and US Army Communications Command equipment employ a three-level/category of maintenance concept.
- d. Based on emerging needs of the field user on the future battlefield, ODCSLOG developed a three category baseline maintenance concept to modernize the total Army maintenance system. This concept does not represent a revolutionary change but rather a natural evolution based on passtudies and experience and high technology requirements for the future. This concept complements forward support maintenance doctrine, integrates viable aspects of restructured general support, and establishes a vertical maintenance management system to bring discipline to the maintenance structure.
- e. Pending baseline revision, materiel developers and combat developers continue to use four-level/category maintenance as a baseline during the development process. Deviations from these levels are identified and documented during the Integrated Logistic Support (ILS) process.
- 5. Benefits of Implementation: This concept allows for planning, performing, and supporting the action of inspecting and maintaining equipment so as to obtain and retain the highest level of material readiness in the most efficient, economical, and reliable manner.
- 6. Resources Required for Implementation: This recommendation and the adjustment to a three category baseline will be implemented using available resources.

7. Method of Implementation:

- a. Reference 1c above was sent worldwide and reestablished the categories of maintenance as they apply to Army materiel.
- b. AR 750-1, Army Materiel Maintenance Concepts and Policies, is being revised and contains an expanded section on levels/categories of maintenance.
- c. Reference 1d was forwarded to TRADOC 27 Sep 82 for assessment and implementing milestones for three category maintenance system.
- 8. Relationship to Other Studies: The LEA study in reference 1b above was already completed and being analyzed when the Logistics Study 1981 was published. The LEA study recommendations and Log 81 Study recommendations were essentially identical. TRADOC (USALOGC) is currently assessing the three category maintenance concept and an IPR is scheduled for Jan 83.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within the Study.
- 10. Coordination: TRADOC, LEA, and the ALA Functional Area point of contact for maintenance concur.

TOPIC: LONG-RANGE LOGISTICS PLANNING

RECOMMENDATION NUMBERS: 6, 6A, 6B

STUDY LOCATION (VOLUME-PAGE): 3-94

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLO)

- a. Study of Army Logistics 1981, Section 3, pages 35-94.
- b. CSR 11-15, Army Programs Army Long-Range Planning System, 8 May 1981.
- 2. Statement of Recommendations:
 - a. "Establish HQDA long-range logistics planning cell."
- b. "Adopt scenario based methodology as standard for long-range logistics
 planning."
- c. "Planning cell be charged to fully define model and extend the projection beyond the year 2000."
- 3. Rationale for Recommendations: The study states that:
 - a. Adequate long-range logistics planning is non-existent in the Army.
 - b. There is no institutionalized logistics long-range planning process.
- c. A scenario based approach will expose voids and insure consistency of logistical and operational planning.
- 4. Analysis of Recommendations: Implementation of recommendation is ongoing and will continue.
- a. ODCSLOG is represented and an active participant in the Army long-range planning system.
- b. A logistics long-range planning working group (LRPWG) was established within ODCSLOG in September 1981. The LRPWG will:
- (1) Prepare the initial draft logistics long-range plan by 12 February 1982.
- (2) Coordinate the draft plan with ARSTAF/MACOMs, revise as necessary, and publish by May 1982.

- (3) Document the workload and procedures in formulating the plan.
- c. A scenario based planning methodology was developed in the Alternative Resource Allocation Priorities (ARAP) study concluded in April 1980.
- d. The ARAP methodology was refined and tested in the Prototype Army Long-Range Appraisal (PALRA) study due to be completed in January 1982. The study group concluded the methodology was effective. USA Concepts Analysis Agency will institutionalize the process following formal approval of the study's conclusion.
- e. The scenario based methodology should be available for the second logistics long-range plan in 1982-1983.
- 5. Benefits of Implementation: Establishment of a mechanism for planning twenty years into the future will provide a long-range planning perspective and timely consideration of doctrinal changes, force design requirements, and material research and development.
- 6. Resources Required for Implementation:
- a. These recommendations are being implemented initially within current resources.
- b. Future resource requirements are being evaluated during development of the first plan.
- 7. Method of Implementation: A long-range planner has been designated within the Directorate of Plans and Operations and a long-range planning working group established within ODCSLOG.
- 8. Relationship to Other Studies: Scenario based methodology was developed and tested by the ARAP and PALRA studies (para 4c and d above). In addition, a contract was awarded in September 1981 to Georgetown University's Center for Strategic and International Studies for study of Strategic Requirements for the Army for the year 2000.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is related to recommendations 7 and 33 concerning doctrinal responsibilities and long-range RDA planning, respectively.
- 10. Coordination: ODCSOPS and ODCSRDA concur.

TOPIC: LOGISTICS DOCTRINE

RECOMMENDATION NUMBERS: 7, 7A, 7B, 7C, 7D, 7E, 7F

STUDY LOCATION (VOLUME-PAGE): 3-92

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

1. Purpose: To obtain Director of the Army Staff approval to adopt selected portions of subject recommendations.

2. Discussion:

- (1) Study of Army Logistics 1981, Section 3, pages 1-29.
- (2) Letter, HQDA, DALO-PLF, 28 Dec 81, subject: Study of Army Logistics 1981.
- (3) Letter, HQ TRADOC, ATCD-SL, 9 Feb 82, subject: Study of Army Logistics 1981.
- b. Statement of Recommendation: "Realign logistic doctrine development responsibilities."
- (1) Recommendation 7A. MTMC be chartered to develop producer level transportation doctrine.
- (2) Recommendation 7B. Establish DARCOM as proponent for producer level supply and maintenance doctrine.
- (3) Recommendation 7C. DA DCSLOG be charged with and staffed to perform, the function of doctrine integration.
- (4) Recommendation 7D. Approval of logistic doctrine be vested in the ODCSLOG.
- (5) Recommendation 7E. CDR TRADOC be relieved of all logistic doctrine interface responsibilities.
- (6) Recommendation 7F. All logistic doctrine developers insure that joint logistic doctrine is developed as appropriate.

c. Rationale for Recommendation: The responsibilities for developing/promulgating logistic doctrine must be clearly defined.

d. Analysis of Recommendation:

- (1) Recommendation 7A. The Log Study 1981 study team had a perception that no one was developing doctrine that explained what mission MTMC would perform within the theater of operations. However, TRADOC is developing doctrine that explains MTMC's role within the theater as is evidenced by the recent coordinating draft of FM 100-16, Support Operations: Echelons Above Corps. TRADOC is responsible for developing Army in the field doctrine. MTMC is a contributor to doctrine development of those points in the transportation system where MTMC missions and functions interact with Army in the field transportation doctrine.
- (2) Recommendation 7B. DARCOM is the operator of the wholesale (producer level) system and in that capacity is best qualified to develop wholesale doctrine. Although AR 10-11 states DARCOM only develops recommendations for doctrine, DARCOM in fact, already does publish wholesale doctrine as is evidenced by FM 38-1, Logistics Management, FM 38-2, Logistics Inventory Management, and others.
- (3) Recommendation 7C and 7E. According to the recommendation originator, the purpose of Recommendations 7C and 7E was to take doctrine interface responsibilities away from TRADOC and give it to DA DCSLOG because the study team felt TRADOC was not doing an adequate job of doctrine interface. However, this would give the ARSTAF responsibility for something which is counter to the policy of limiting HQDA to policy and planning functions. It would also require increasing the ODCSLOG staff by about 10 The logistic system extends from the factory of the foxhole. The people. system exists to support combat operations and it is essential that doctrine The most crucial point in the reflect the needs of the combat commander. system is the interface between wholesale and retail operations. Development of doctrine with the user's needs in mind can best be accomplished by leaving the interface responsibility with TRADOC. Shifting the responsibility away from TRADOC as the user's representative would give the system a tops-down instead of a much needed bottoms-up orientation.
- (4) Recommendation 7D. AR 10-5 gives the DCSLOG general staff responsibility for development and supervison of the Army logistic organization and systems worldwide, including doctrine. As such, the DCSLOG already has the necessary authority to insure that logistics doctrine is properly developed.

- (5) Recommendation 7F. With the evolution of airland battle doctrine, the necessity for well coordinated logistic doctrine and procedures becomes critical. The recently approved REDCOM-TAC-TRADOC Memorandum of Agreement establishes the vehicle by which logistic doctrine and procedures in support of joint operations can be developed, coordinated, and evaluated.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations Within the Study of Army Logistics 1981: These recommendations are related to Recommendation Number 6.
- g. TRADOC DARCOM MTMC, ODCSOPS and ASA(IL&FM) concur with this memorandum.

3. Recommendation:

Adopt the study recommendations in accordance with the following matrix:

Recommendation	Adopt	Not Adopt
7 A		X
7B	X	
7C		Х
7D		Х
7E		Х
7F	X	

TOPIC: PART NUMBERS ELIMINATION

RECOMMENDATION NUMBER: 8

STUDY LOCATION (VOLUME-PAGE): ANNEX D

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics 1981, Section 16, pages 70-76.
- b. LEA Study "Assignment of NSN's to Items with P/N's."
- 2. Statement of Recommendation: "Eliminate Part Numbers (P/N) in lieu of National Stock Numbers (NSN's)."
- 3. Rationale for Recommendation: This study states that the submission of requisitions which contain part numbers instead of national stock numbers places an extra, unneeded burden on the logistics system.
- 4. Analysis of Recommendation: Implementation of recommendation is partially ongoing and will continue.
- a. Army currently submits 724,500 requisitions per month of which about 36,000 are part numbered.
- b. DAAS screening identifies about 3000 part-numbered requisitions per month that have NSN's already assigned leaving about 33,000 part-numbered requisitions per month.
- c. Processing these part-numbered requisitions is highly manually intensive and costly.
- d. There are currently 1.1 million NSN's with Army interest and 2.7 million part numbers.
- e. The recommendation is somewhat misleading in that a manufacturer's code and part number must be retained at the wholesale level for procurement purposes.
- f. The real meaning of the recommendation is to eliminate or minimize the use of part numbers in the field to solve the part number requisitioning and research problems.



- 5. Benefits of Implementation: Greater use of NSN's would greatly reduce a large manual workload on the field in the area of requisition processing and cataloging research. Additionally, this will place the cataloging responsibility at the wholesale level where it belongs, reduce rejections to the field, and improve overall supply support to the field. While specific dollar savings vary widely between studies, Log Study 81 indicates a savings of approximately \$1.7 million per month if part-numbered requisitions were eliminated.
- 6. Resources Required for Implementation:
- a. Resources were not addressed in Study of Army Logistics 1981; however, LEA study indicates 956 man-years of effort would be required within DARCOM merely to assign stock numbers to existing part-numbered items which might be requisitioned and procured during the life of a system.
- b. The Army is currently examining ways to implement this recommendation which would minimize the need for additional resources.
- 7. Method of Implementation: Several actions are currently underway to reduce this problem both in near term and long term.
- a. The Catalog Data Agency (CDA) has been designated the central point within DARCOM to monitor the assignment of NSN's to part numbers receiving three demands in 180 days.
- b. They are being provided a listing of all qualifying items from the Logistics Intelligence File beginning February 1982 and plan to have an automated suspense and control system in place by April 1982.
- c. ODCSLOG has developed and is currently staffing a new NSN assignment policy which would require the automated system in the DARCOM MSCs to request an NSN for any new item which might be procured or requisitioned during the life of a system during the provisioning process.
- d. ODCSLOG is currently working with DARCOM and TRADOC to develop a central demand data bank which will capture all part-numbered demands to include local purchase demands at the user level.
- 8. Relationship to Other Studies: Past analysis has recognized this problem and innumerable recommendations have been made; however, a clear consensus for a solution has been difficult to obtain.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM and TRADOC concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: RETURN OF REPARABLES

RECOMMENDATION NUMBER: 9

STUDY LOCATION (VOLUME-PAGE): 14-338

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- 1. Reference Study of Army Logistics 1981, Section 14, page 274.
- 2. Statement of Recommendation: "Discipline system for return of reparables."
- 3. Rationale for Recommendation: The Army's unsatisfactory status of reparable returns has resulted in OSD budgetary cuts and continued Congressional interest in the management of reparable assets. The recommendation contained five supporting recommendations which were addressed in January 1982 memorandums.
- 4. Analysis of Recommendation: Implementation is ongoing and will continue.
- a. Policy for management of reparables is contained in AR 710-2, Supply Policy Below the Wholesale Level. This regulation has been completely revised into a policy book and two procedures pamphlets; DA Pam 710-2-1 for using units, and DA Pam 710-2-2 for supply support activities. These documents became effective 1 April 1982 and contain detailed policy and procedures for reparables management.
- b. Management actions discussed in supporting recommendations 9A through 9E are aimed at gaining visibility of reparables to insure that these assets are recorded, repaired, and returned to the supply system in the shortest possible time. These initiatives, combined with the guidance provided by AR 710-2, provide field commanders with the means to both discipline and control reparable return rates.
- 5. Benefits of Implementation: Field returns of unserviceable secondary items are needed to meet Army requirements, since we depend on approximately 75 percent of customer demands being satisfied through return and rebuild of unserviceables.
- 6. Resources Required for Implementation: DARCOM has identified additional five manpower spaces required to maintain the Logistics Intelligence File reparable/excess management system (supporting recommendations 9A and 9B). Requirement will be satisfied from present resources for FY 82, and programed as additional requirement beginning FY 83. No other additional resources required for supporting recommendations 9C, D, and E.

- 7. Method of Implementation: New policy and procedure for reparables management has been published in AR 710-2, effective 1 April 1982. Automated systems identified in support recommendations 9A through 9E will be used to report return rates and highlight problem areas for command attention.
- 8. Relationship to Other Studies: Numerous DAS, Army, and GAO studies have recognized the problem of low reparable return rates within Army. Army Logistics 1981 Study highlights ongoing Army initiatives in this area.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981. This recommendation is not influenced or paced by other recommendations within this study.
- 10. Coordination: DARCOM, OASA(IL&FM), and Army Logistics Assessment Office concur.

TOPIC: RETURN OF REPARABLES

RECOMMENDATION NUMBERS: 9A, 9B

STUDY LOCATION (VOLUME-PAGE): 14-274

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference Study of Army Logistics - 1981, Section 14, page 14-274.

- 2. Statement of Recommendation:
- a. "That policies/procedures be developed and enforced to fix responsibility for asset turn-in.
 - b. That needed controls be built into system for turn-in follow-up."
- 3. Rationale for Recommendation: The study states that 71 percent of the PA, A reparables are being returned at rates below the OSD target of 90 percent return rate for depot reparable items. One impact of this poor return rate has been DOD budget cuts in FY's 77, 78, and 81. Further cuts have been proposed for the FY 83-87 timeframe. Army return rate (66 percent) does not compare favorably with that of the Navy (90 percent) and Air Force (95 percent).
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. As outlined on page 14-236 of subject study, the Army has initiated numerous management actions to improve depot reparable return rates.
 - b. The problem continues until these actions are fully implemented.
- c. Recent progress has been made in the development and fielding of the Army Retrograde Management System (ARMS) and the Recovery Improvement Program Reporting System (RIPRS). Both of these systems are maintained by the USA DARCOM Logistic Control Activity (LCA) using the Logistic Intelligence File (LIF) data base.
- d. ARMS provides MACOMs with visibility over the retrograde pipeline. Delays in the return of reparables are displayed for corrective action. Efforts are ongoing in DARCOM to extend this visibility system down to the Supply Support Activity (SSA) level.

- e. RIPRS provides MACOMs with reparable return rates by installation, appropriation, and commodity. It gives commanders a tool to exercise their responsibility to insure the timely return of reparables.
- f. Action continues to refine ARMS and RIPRS reports and to provide DA/DARCOM oversight of reparable returns down to SSA level. Full implementation of management actions outlined on page 14-236 will serve to improve Army reparable return rates.
- 5. Benefits of Implementation: Army's ability to demonstrate improved reparable return rates will preclude further budget cuts and insure better utilization of existing reparable items.
- 6. Resources Required for Implementation:
- a. Return of reparables remains a command responsibility accomplished within existing logistic resources.
- b. DARCOM has identified additional manpower spaces required at the LCA to maintain the LIF reparable/excess management systems.
- 7. Method of Implementation:
- a. DARCOM has been tasked with development of management information system to control the return of reparables.
- b. MACOMs are charged with insuring the expeditious return of depot reparables.
- c. Reparable return rates are made an item of interest for CLRTX and DAIG visits/inspections.
 - d. DA ODCSLOG maintains oversight of DARCOM and MACOM efforts.
- 8. Relationship to Other Studies:
- a. This issue is related to the DOD-directed study: "Stock Funding of Depot Level Reparable Components," May 1980.
 - b. Other related studies:
- (1) DAS Audit 80-041, 17 December 1979, "Review of Replenishment Policies for Secondary Investment Items."
 - (2) AAA (M $\times 78-17$), April 1978.
 - (3) LEA Study, August 1977.

- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: These recommendations are directly related to the following recommendations also on page 14-274:
 - a. Allow control of selected items to remain in ICP.
- b. Revise system to insure item management visibility at installation/DS levels.
 - c. Review/clarify coding depot level reparables.
- 10. Coordination: DARCOM , OASA(IL&FM), and the functional area point of contact for inventory $control\ concur$.

TOPIC: OWNERSHIP/VISIBILITY OF SELECTED RETAIL ASSETS

RECOMMENDATION NUMBERS: 90, 9D

STUDY LOCATION (VOLUME-PAGE): 14-274

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics 1981, Section 14.
- b. DOD Directive 4140.44, February 28, 1978, subject: "Supply Management of the Intermediate and Consumer Levels of Inventory."
- 2. Statement of Recommendation:
- a. 9C: "Retain control of selected items at the Inventory Control Point."
 - b. 9D: "Obtain item visibility at installations/DS."
- 3. Rationale for Recommendations:
- a. Discussion with DARCOM study personnel resulted in interpretation of recommendation 9C to mean wholesale ownership of selected retail assets.
- b. Recommendation 9D is considered a more logical approach, in that retail would continue to own their assets, but visibility would be provided to wholesale.
- 4. Analysis of Recommendation: Recommendation 9D has already beer implemented.
- a. Reference 1b requires daily summary transaction item reporting to the appropriate ICP from CONUS installations/DS on selected short supply, essential, or high dollar items.
- b. The reporting system is known as Selected Item Management System-Expanded (SIMS-X), and it was activated during November 1980. However, the effectiveness of the reporting has been limited by the incomplete extension of retail automated supply systems. Specifically, the Direct Support Standard Supply System (DS4) will not be available throughout the DS level until calendar years 1984-1985.



- 5. Benefits of Implementation: Once DS4 is extended sufficiently to provide Army-wide visibility of DS level assets, benefits should be realized. Requirements forecasting of procurement and depot level maintenance should improve. A limited redistribution capability (probably constrained to CONUS) could be considered. The additional visibility should assist in improving the reparable return rate.
- 6. Resources Required for Implementation: This recommendation has been implemented using available resources.
- 7. Method of Implementation: SIMS-X information is transmitted via AUTODIN from retail to wholesale. Currently, the information is used by DARCOM item managers in an off-line, as required, basis. With DS4 extended, other uses for SIMS-X data can be pursued.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: Recommendation 9 is a blanket recommendation to discipline the system for returning reparables. Recommendations 9C and 9D are two of a number of recommendations intended to improve reparable return rates.
- 10. Coordination: DARCOM concurs.

TOPIC: SOURCE, MAINTENANCE AND RECOVERABILITY CODING

RECOMMENDATION NUMBER: 9E

STUDY LOCATION (VOLUME-PAGE): 14-274

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- 1. Reference Study of Army Logistics 1981, Section 14, pages 230-275.
- 2. Statement of Recommendation: "That DARCOM review and in conjunction with DA clarify the Source, Maintenance and Recoverability coding of all depot level reparable items."
- 3. Rationale for Recommendation: The study displays a great deal of old statistics indicating that the Army's return rates have been historically poor and have even resulted in budget cuts from OSD. One of the reasons proposed by the study is that the items may not be properly coded for level of repair and are subsequently not being returned to the wholesale level where return rates are measured.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. In October 1981, the first increment of items which had been reviewed and recoded by the DARCOM MSCs was realigned between stock fund and Procurement Army Appropriations.
- b. DARCOM was to complete the review and complete the realignment actions in FY 84 or 85.
- c. In the midst of this effort, the Army conducted a study at OSD's request into the feasibility of stock funding all depot level reparables as a method of improving return rates. Under current OSD guidance, all depot level reparables should be investment, procurement appropriation, funded.
- d. Even though the evidence indicated no improvement in return rates resulted from stock funding depot level reparables, a recommendation was forwarded to OSD requesting Army be allowed to stock fund all but 1400 high dollar, high impact depot level reparables.
- e. OSD did not approve this recommendation and wanted Army to stock fund all or none of the depot level reparables.

- f. ODCSLOG is currently in the process of withdrawing the request to stock fund depot level reparables.
- g. Due to the turbulence in funding which results from these realignments and DARCOM's position that all depot level reparables should be stock funded, the realignment has been put in a hold status by DARCOM pending resolution of this issue.
- h. It is anticipated that this issue will be resolved by February 1982 and DARCOM will be directed to complete their review and recoding of the remaining depot level reparables.
- i. Due to the leadtime required to realign funds between appropriations, it is not expected that this project will be completed until FY 85 or 86.
- 5. Benefits of Implementation: This review of coding of depot level reparable items should delete items miscoded from unserviceable return computations, reduce unauthorized repair in the field, and result in improved return rates for depot level reparables which have already greatly improved since the era of budget cuts. Additionally, improved return rates mean less procurement dollars will be required since the Army will be able to satisfy more requirements through less costly repair.
- 6. Resources Required for Implementation: Priority of workload on this assignment must be established by DARCOM. No additional resources will be required.
- 7. Method of Implementation: Each depot level reparable item not already reviewed for the FY 82 alignment must have its source, maintenance, and recoverability coding manually reviewed and corrected by appropriate personnel within the DARCOM MSCs. A computer program to select the items and build a corrected realignment file is already in existence. A separate budget realignment stratification must be run from this file and appropriate budget adjustments made. This program requires a review to determine whether seletion guidance is adequate.
- 8. Relationship to Other Studies: Numerous DAS, Army, and GAO studies have recognized the problem of low unserviceable return rates within Army. A number of Army initiatives has been implemented in this area.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study. However, it is one of several aimed at improving return of unserviceable reparables, and its completion will enhance some of them.
- 10. Coordination: DARCOM concurs.

TOPIC: THEATER CONSTRUCTION POLICY

RECOMMENDATION NUMBER: 10A

STUDY LOCATION (VOLUME-PAGE): 23-60

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLO)

- a. Study of Army Logistics 1981, Section 23, page 40.
- b. Joint Logistics Policy and Guidance (JCS Pub 3).
- 2. Statement of Recommendation: "That there presently is no approved austere theater construction policy to constrain requirements."
- 3. Rationale for Recommendation: The study infers that theater construction is not restricted by present policy thus an opportunity exists for construction requirements to be inordinately high.
- 4. Analysis of Recommendation: Reference b provides guidance in the following manner:
- a. JCS Pub 3 provides guidance for both unified and specified commands and services concerning theater construction policy.
 - b. Two construction standards are identified:
- (1) Initial standard is characterized by austere facilities, minimizing engineer effort, and intended for use for a limited time ranging from 1 to 6 months.
- (2) Temporary standard is characterized by minimum facilities, intended to increase efficiency of operations, for use extending to 24 months. This standard provides for sustained operations.
- c. Procedures are described and responsibilities defined for providing an integrated civil engineer support plan (CESP) in support of joint contingency operations.
- (1) Commanders of unified and specified commands are responsible for the preparation of CESP as a part of the joint operation planning process.

- (2) Commanders implement standards of construction by selecting specific facilities from a master file (Army Facilities Component System), considering mission, personnel health and safety, and the expected availability of construction materials.
- (3) The CESP is reviewed by the services and OJCS to insure planning adequacy, OPLAN supportability, and that appropriate standards of construction are established.
- 5. Benefits of Implementation: JCS Pub 3 in conjunction with the Army facilities component system provides planners uniform construction standards for planning, which are later tailored to meet requirements of the theater as circumstances warrant.
- 6. Resources Required for Implementation: None; JCS Pub 3 is already published.
- 7. Method of Implementation: JCS Pub 3.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: A supporting recommendation to number 10; however, it is not paced by any other recommendations.
- 10. Coordination: ODCSOPS, OCE concur.

FUNCTIONAL AREA: Doctrine

TOPIC: ENGINEER INTELLIGENCE

RECOMMENDATION NUMBER: 10B

STUDY LOCATION (VOLUME-PAGE): 23-60

PROPONENT OFFICE: HQDA OCE (DAEN-ZCM)

- a. Study of Army Logistics 1981, Section 23, Pages 23-42, 43.
- b. DF, DALO-PLZ-A, 7 December 1981, subject: Logistics Study 81-January 1982 DAS Update.
- 2. Statement of Recommendation: "Improve Engineer Intelligence."
- 3. Rationale for Recommendation: The study states that reliable and up to date intelligence on construction resources (i.e., materiels, equipment, contractors and LOC conditions/capacities) is lacking. There is no other reference in the study which supports this recommendation.
- 4. Analysis of Recommendation: The recommendation suggests that there is no mechanism in Civil Engineering Support Planning (CESP) or overseas Military Construction Programs (MILCON) Planning to provide for timely engineering response during contingencies. Current ongoing policies, and planning systems provide for up-to-date and reliable intelligence in potential employment areas on availability and location of facilities, construction materiels and equipment; contractor availability for support in peacetime and wartime; procurement channels for material not locally available; and timely information on key aspects of terrain. Specifics follow:
- a. The Civil Engineering Support Plan Generator (CESPG) is a theater automated planning system for determining facility requirements. It computes the specific time phased requirements and matches them against existing facilities which are determined by a thorough inventory of US and host nation available facilities and compares the data in the assets file of the CESPG. If a facility shortfall exists it is displayed in executive tabs for use by contingency planners who might, for instance, elect to recommend that we accept a risk; or take necessary actions to provide for the facilities when needed. These might include solicitation of more Host Nation Support, or initiation of peacetime construction. This is a continual planning process for which the CINC of the unified or specified command is responsible; it is subject to OJCS approval. Systems improvements are required and are programed.

- b. Another process exercised in theaters (or potential theaters of operations) which involve resource planning are Operational Projects (OP). These are initiated by the MACOMs based on OPLANs and consist of prepositioned materiels (to include Class IV), which are required at a specific place for use in contingencies. For engineering materiel, the OP usually consists of a Bill of Materiels above and beyond authorizations determined in part by in-depth knowledge of host nation facilities and other existing resources.
- c. In the development of Military Construction Programs by Overseas Commands, the Engineer Districts (i.e., Far East, European and Mid-East) compile detailed prequalification data on contractors who participate in the competitive bid processes for construction. Data on material availability is also compiled during subsequent contract execution. A rapport and familiarity with the contractors are developed by the peacetime associations.
- d. The Army (OACSI/OACE/DMA) has specific responsibilities and capabilities in fields of terrain analysis/intelligence, i.e., to prepare combat oriented studies and analyses involved in supporting Overseas Commands, CONUS MACOMs and Unified Commands. The resultant products are map overlays and data bases usable in standard and nonstandard decision processes. The Army recently completed 94 map sheets for water sources data for the RDJTF.
- e. As part of Joint Reporting System, the Army provides major input to the Contingency Construction Report (CONREP) which summarizes the physical and funding status of construction programs for facilities which may be in support of contingency operations; and the US Base Requirements Overseas (USBRO) Report which is a compendium of overseas bases, installations and facilities required by US in peacetime and/or in support of JCS OPLANs (consists of actual or potential requirements worldwide). These, plus the Civil Engineering support file in paragraph 4a above, provide a product requiring detailed intelligence gathering and evaluation for use in wartime contingencies.
- 5. Benefits of Implementation: The continued production of engineering resource intelligence will assure availability of required facilities and material where and when required during contingencies.
- 6. Resources Required for Implementation:
 - a. This recommendation is being implemented using available resources.
 - b. The resources available are adequate to continue implementation.

- 8. Relationship to Other Studies: The Civil Engineering Support Plan Generator paragraph 4a above is a product of the OJCS Joint Contingency Construction Requirements Study 1979.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to the supporting recommendations under Recommendation Number 10. Close coordination will be required with the proponents of each recommendation to insure their proper implementation.
- 10. ODCSOPS, ODCSLOG and ESC concur.

FUNCTIONAL AREA: Doctrine

TOPIC: REFINING CIVIL ENGINEER SUPPORT PLAN REQUIREMENTS

RECOMMENDATION NUMBER: 10C

STUDY LOCATION (VOLUME-PAGE): 23-60

PROPONENT OFFICE: HQDA OCE (DAEN-ZCM)

1. Reference:

- a. Study of Army Logistics 1981, Section 23, 23-43.
- b. JCS Pub 3, Volume I, dated July 1979.
- c. Joint Contingency Construction Requirements Study, JCCRS 33-79, November 1979.
- 2. Statement of Recommendation: "Develop Policy and Procedures for Refining Civil Engineer Support Plan Requirements."
- 3. Rationale for Recommendation: Reference 1a states that there is no specified procedure for refining requirements; that there are no Unified Command policies and procedures, e.g., JCS Pubs.

4. Analysis of Recommendation:

- a. The JCS II study (Ref 1c) provided a theater automated system for determining time phased facility construction requirements in a Theater of Operations known as the Civil Engineering Support Plan Generator (CESPG). The CESPG was designed to compute specific time phased requirements and match them against existing facilities which are determined by a thorough inventory of US and host nation facilities. Any resultant shortfall determines construction requirements in accordance with theater construction policies. The software for this system was based on a thorough revision of joint standard planning factors, standards of construction (emphasis on austerity), threat, and Service roles and missions.
- b. CESPs are a Unified Command responsibility and subject to the construction policies which are the prerogative of a particular command and which provide guidance to components in requirements planning. When raw requirements are produced by the CESPG, they should be evaluated in accordance with the theater constructions policy. Aspects of the policy (e.g., build/no build policy, no construction till D+30, etc.) can be incorporated into the CESPG program.



- c. The CESPG is in operation in EUCOM and in process of being extended to RDJTF and WESCOM as part of JOPS. In the development of the first iterations of CESPG support plans, player input had been such as to make theater facility requirements excessively high and thus meaningless. However, in the most recent experience with the RDJTF OPLANs, extreme efforts were made to reduce category codes to the bare minimum to drastically reduce the requirements in the interests of austerity and essentiality. This approach will continue.
- d. All CESP of Joint OPLANs are submitted to and reviewed by JCS in coordination with the Service Departments. Part of this review is to determine the presence of a cohesive construction policy.
- 5. Benefits of Implementation: Current CESPG systems, systems improvements, and review processes assure for the application of cohesive policies and procedures. However, constant monitorship should continue to assure that requirements are realistic and austere. Extension of CESPG should continue to all Unified Commands.
- 6. Resources required for Implementation: Continue to provide resources to extend CESPG to the Unified Command.
- 7. Method of Implementation: As previously described.
- 8. Relationship to Other Studies: Reference 1c above.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to supporting recommendations 10A, B and D.
- 10. ODCSOPS, ODCSLOG and ESC concur.

TOPIC: BASE DEVELOPMENT

RECOMMENDATION NUMBER: 10D

STUDY LOCATION (VOLUME-PAGE): 23-60

PROPONENT OFFICE: HQDA OCE (DAEN-ZCM)

- a. Study of Army Logistics 1981, Section 23, Pages 38-61.
- b. Army Facilities Components System, TM's 5-301, 5-302, and 5-303.
- c. JCS Pub 3, Volume I, dated July 1979.
- 2. Statement of Recommendation: "Update Base Development Designs and Develop Expedient Base Development Scheme."
- 3. Rationale for Recommendation: The study states that engineer requirements need to be minimized for base development; therefore, updated facility and building designs and base development schemes are required to support the initial force deployments.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Army Facilities Components System (AFCS) provides the facility and building designs which are used in based development planning. AFCS facilities are used in the Facility Component Definition File which provides input for new construction projects to the Civil Engineering Support Plan Generator (CESPG). The CESPG is an automated system for determining base development requirements. The Office of the Assistant Chief of Engineers (OACE) is the Army Staff proponent for the AFCS.
- b. The AFCS is currently being updated to reflect the requirements of JCS Pub 3 which was revised in 1979 to reflect two construction standards, initial (1-6 months), and temporary (6-24 months), with an emphasis on the initial standard. Most of AFCS is currently band on the old three standards of construction which included longer term facilities.

- c. The AFCS has initiated several projects in an effort to minimize engineer requirements for base devolopment. These include identification of lightweight relocatable buildings; a survey of the availability of local materials in various countries throughout the world, and building designs with local materials. The Facility Component Definition File is being reviewed to insure that each facility reflects maximum austerity, and when it is determined that designs can be simplified, appropriate projects will be developed.
- 5. Benefits of Implementation: The development of more austere projects for base development will allow scarce engineer resources to be concentrated on battlefield requirements and will lessen the impact of construction materials on the logistics system.
- 6. Resources Required for Implementation:
- a. The OACE provides adequate staffing for the management of AFCS. The US Army Engineer Division, Huntsville, is authorized four civilians who manage the design of AFCS projects.
 - b. This recommendation is being implemented using available resources.
- c. The resources available are adequate to support the level described in 6a above. It is anticipated that the implementation of this recommendation could be expedited by the provision of additional staff; however, this requirement will not be known until after the review of the Facility Component Definition File, which will be completed later this year.
- 7. Method of Implementation: Office is already established within the Huntsville Division. Funds are provided through a combination of MCA and OMA appropriations. If an expansion of staff is deemed necessary to implement this recommendation, additional funding will be requested.
- 8. Relationship to Other Studies: The US Army Engineer Studies Center (ESC) is currently performing a study of AFCS to make recommendations for management improvements and to provide general guidance on converting to the two standards of construction. The results of this study, which are expected in late summer of this year, should assist in the implementation of the recommendation; however, the accomplishment of ongoing projects will not be delayed.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to the supporting recommendations included under Recommendation Number 10. Close coordination will be required with the proponents of each recommendation to insure their proper implementation.
- 10. Coordination: ODCSLOG and ODCSOPS concur.

ADDED INFORMATION - Nov 82

ESC Study mentioned in paragraph 8 has been completed.

TOPIC: BASE DEVELOPMENT

RECOMMENDATION NUMBER: 10E

STUDY LOCATION (VOLUME-PAGE), 23-60

- a. Study of Army Logistics 1981, Section 23, pages 15-17.
- b. Joint Logistics Policy and Guidance (JCS Pub 3).
- 2. Statement of Recommendation: "That long range planning tailored to specific potential contingencies is essential to insure reception and throughput of the force."
- 3. Rationale for Recommendation: The study states that base development planning for undeveloped potential contingency areas will significantly improve Army capabilities.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. Commanders of unified and specified commands are responsible for the preparation of a civil engineer support plan (CESP) as a part of the joint operation planning process. A CESP is included in OPLANs which include significant deployment and redeployment of military forces in a theater of operations. The CESP is forwarded with the OPLAN to the Joint Chiefs of Staff for approval.
- b. The CESP is reviewed by the services and OJCS to insure planning adequacy and OPLAN supportability. This review takes place during the OJCS review and validation process.
- 5. Benefits of Implementation: Army capabilities are enhanced early in the conflict when OPLANs include facility construction planning.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: Recommendation is ongoing and no additional resources are needed.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: A supporting recommendation to Number 10; however, it is not paced by another recommendation.
- 10. Coordination: ODCSOPS, OCE concur.

TOPIC: FORCE MODERNIZATION

RECOMMENDATION NUMBERS: 12, 12A, 12B

STUDY LOCATION (VOLUME-PAGE): 26-284, 26-286

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FM)

- a. Study of Army Logistics 1981, Annex D; Section 5, 9, and 26.
- b. Memorandum, DACS-ZD, 16 October 1981, subject: Management of Modernization.
- c. Letter, HQDA, 10-81-2, 25 November 1981, subject: Army Force Modernization Coordination Office (AFMCO).
- 2. Statement of Recommendation: "Establish a single DA staff agency for Force Modernization."
- 3. Rationale for Recommendation: The study found Force Modernization to be a complex process, consisting of multiple new systems at various phases of the life cycle model, all competing for limited resources. A management process was seen to be required to address the interrelationship of the new systems. The study saw only a vertical management of modernization, system by system; and saw a need to marage modernization across all Army ...stems--"The Horizontal Look."
- 4. Analysis of Recommendation: This recommendation has been essentially implemented as a result of this and other studies/actions. Extracts of appropriate references implementing this are cited below:
- a. The Army Force Modernization Coordination Office (AFMCO) has been designated the Army staff focal point for all force modernization actions. (Ref 1.c.)
- b. AFMCO has been placed under the OPCON of DCSOPS, with the Chief, AFMCO, as a Special Assistant to the DCSOPS for Modernization. (Ref 1.b.)
- c. AFMCO is to develop a Force Modernization Master Plan (FMMP) which will provide a "roadmap" for fielding both new organizations and equipment. Ref 1.c.) Embedded in the FMMP concept are supportability assessments. These assessments will analyze supportability for selected material systems vertical) and across functions such as supply, resourcing, and personnel reizontal assessments).



- d. The organizational placement of AFMCO is to be reviewed by the DCSOPS upon completion of the ongoing Inspector General review of the modernization management process. (Ref 1.c.)
- 5. Benefits of Implementation: Placing AFMCO OPCON to DCSOPS will insure unity of DA staff effort, facilitate Army-wide coordination, and make the best possible use of operations channels for both force modernization planning and actual transition execution.
- 6. Resources Required for Implementation: To be determined at the conclusion of the Inspector General review of modernization when the AFMCO Charter will be reviewed by the DCSOPS and recommended changes will be made to the VCSA.
- 7. Method of Implementation: AFMCO is functioning as DA single point of contact for Force Modernization matters pending completion of the Inspector General review of modernization.
- 8. Relationship to Other Studies: The Inspector General is conducting a review of Force Modernization, with final report due to the VCSA in June 1982.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: The final resolution of this recommendation has an impact indirectly on many of the study's recommendations. It has a direct impact on the recommendations concerning the establishment of ISS and ILS responsibilities (Annex D; Section 9).
- 10. Coordination: The Inspector General has noted.

TOPIC: CENTERS OF TECHNICAL EXCELLENCE (CTX)

RECOMMENDATION NUMBER: 13

STUDY LOCATION (VOLUME-PAGE): 26-284

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- 1. Reference Study of Army Logistics 1981, Section 14, pages 156-238.
- 2. Statement of Recommendation: "Complete Centers of Technical Excellence (CTX) Review and implement CTX."
- 3. Rationale for Recommendation: This concept will formalize existing depot involvement and increase depot involvement to strengthen their direct link to the fighting soldier. CTX would bridge the gap between producer and consumer and move the depot closer to the Army in the field.
- 4. Analysis of Recommendation: CTX is a concept to make optimum use of unique skills and capabilities that exist in the DARCOM depot system.
- a. Each major system, such as M-1 tank, would be supported from a technical assistance viewpoint primarily by a single CONUS depot.
- b. The depot would perform physical teardown and maintenance evaluation, Depot Maintenance Work Requirement (DMWR) writing/validation, collect maintenance data, develop test procedures, and assist in design and development for new systems when they are brought early on into the Integrated Logistics Support (ILS) efforts.
- c. This will provide unique "hands-on" opportunity to supplement MOS training of field soldiers in CONUS units and provide technical assistance to resolve field maintenance problems.
- $\mbox{d.}$ This effort will enhance Reserve Component proficiency through annual and weekend training of Reserve units.
- e. Depots also provide alternate sources of supply through fabrication, reclamation, controlled cannibalization, and local procurement in support of assigned systems.
- f. CTX will provide a single point of contact for each weapon system. Technical personnel dedicated to a weapon system would provide 2^{μ} -hour service for field assistance and resolution of problems.

- g. An outgrowth of the CTX concept would be formulation of a product warranty program. Product warranty is a formal commitment from the depot-CTX to the user that would guarantee the quality of new or overhauled equipment from a depot-CTX. This guarantee would include replacement, repair, or field assistance at DARCOM/depot-CTX expense for any equipment missing or defective as a result of failing initial acceptance, test, quality assurance, packaging, or other problems that do not relate to user responsibility.
- 5. Benefits of Implementation: Implementation will develop better interface between the DARCOM depot community, DARCOM Project Managers (PMs), DARCOM Major Subordinate Commands (MSCs), as well as with the field, and allow "hands on" type personnel to become involved early in the ILS cycle. It will also provide unique depot skills to the ILS process and provide an auxiliary training base for FORSCOM, TRADOC, and Reserve Components training.
- 6. Resources Required for Implementation: This is DESCOM management reorganization; no additional spaces or dollars will be required.
- 7. Method of Implementation: HQ Depot Systems Command (DESCOM) and each depot have been instructed to establish a Force Modernization Office organizationally structured to provide visibility at the DESCOM level. In order to assure complete integration of the depot technical base to support the total weapon life cycle, the concept "Centers of Technical Excellence (CTX)" has been developed. This major function falls under the overall force modernization umbrella and is the action arm for execution of DESCOM roles in materiel system support. A CTX is a depot which has been designated to serve as DECSOM's program manager for a specific weapon system. These weapon systems will be those currently in the ILS Acquisition Life Cycle or those currently being fielded as warranted by program magnitude and significance to the Army as assigned by the HQ DESCOM Force Modernization Office.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM, COA, ODCSPER, PA&E, and AFMCO concur.

FINET NATIONAL Structure

TOPIO: LOGINT OAL STROKT HASE

RECOMMENSATI W NUMBER: 14

STUDY LOCATION (VOLUME-PAGE): 14-338

FROPONENT OFFICE: HQDA ODCSLOG (FALO-SMP-P)

- 1. Reference Study of Army Logistics-1981, Section 14, Pages 98-118.
- 2. Statement of Recommendation: "That a single PARCOM element be established in Europe to coordinate the activities of all DARCOM elements in the theater and to assist in force modernization."
- 3. Rationale for Recommendation: The study states that overall support for the Army in the field needs to be strengthened. Logistics programs need to be integrated so that there is a single DARCOM manager in Europe to insure the best possible DARCOM support to the field. Finally, the organizational splintering needs to be reduced for more efficient and effective support management.
- 4. Analysis of Recommendation: Implementation of the recommendation was approved by the Vice Chief of Staff on 1 December 1981, and final implementation is scheduled for July 1982.
- a. Commanding General of DARCOM FORWARD will exercise command and control over all DARCOM elements on the continent of Europe. Two small DARCOM elements in England will remain independent.
- b. DARCOM is taking the spaces to establish this headquarters element from its existing resources.
- c. The site has been selected at Seckenheim, Germany, and the facility is currently being renovated.
 - d. The TDA has been submitted for DA approval.
- e. This is a DA approved and on going action which will be deleted from further consideration under Log Study 81.
- 5. Benefits of Implementation: This element will facilitate transition to war, provide organized DARCOM support to USAREUR, centrol DARCOM workload and resources in USAREUR, improve communications between USAREUR elements and DARCOM CONUS elements, optimize the use of in-country versus CONUS DARCOM facilities, reduce overhead through streamlined organization, reduce travel expenses and the requirement for CONUS teams.

- to become es Requiret for Inglementation:
- a. The proposed TDA calls for 50 divilian (4 local materials and at EAD) and 27 military personnel.
 - b. Communications links need to be established.
 - e. Headquirters building being renovated.
- d. This recommendation is being fully implemented using available resources.
- 7. Method of Implementation: Beadquarters is being established using GARGOM current resources and will be funded out of DARGOM's current budget.
- 8. Relaionship to Other Studies: None.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics-1981: None.
- 19. Goordination: DARCOM, OCOA, ODCSPER and PA&E concur.

PUNCTIONAL APPAIRS Management of the same and a re-

debic: Complete Complete

PRINCIPATION SIMERRY 16

STUDY ELECTION OF COMMERCA HERE IN THE FIRST

IBOIOMENT OFFI 'F: HUDA COULTS (IAM HAUR)

- a. Study of Arry Logistics 1961, section o, pages 46-4'.
- b. AR 7140, busis of Lone Pour (P.Mr).
- 2. Statement of Beginner to time: "I mbine BOIF/QQPRI; refine the process."
- R. Rationale for Secommendation: The study echoluded that a high percentage of BOIP and QUEST were submitted late for DA approval. Due to the fact that the mean time of the delayer differed between these documents, it was recommended they be combined and the process refined to preclude delays.
- 4. Analysis of Resemmendation: Implementation of recommendation is ongoing and will continue.
- 3. The PARCOM system for processing BCIP/QQPRI was initially refined in July 1920 through an "event-triggered" submission system. Additionally, BOIP feeder 34% was combined at the fateriel Readiness Support Activity (MRSA) with 4QPRI for submission to TRADOC
- b. During 1st Qtr FY81, DAMO initiated a working agreement with TBADQC to "markage" the BOIP an QUPRI with the Requirements Document as a single submission for DA approval. The aforementioned "event missered" system and the "bankage!" submission have recently been incorporated into AR 71-2.
- o. Current DEEDEODER initiatives aimed at streamlining the acquisition system have targeted several BOIP/QQPBI related areas for refinement. These areas will recoive 90 Steering Committee scruting with implementation of "fixed" between present and 1 July 1989.
- 1. TAP-CM AMm Modernization Program will automate most of the BUIE/QUPRI process and eliminate need for several forms. Originally scheduled for FY82, the program has been slipped until FY83.
- 5. Benetits of Implementation: Simplicity will be achieved through gradual refinements culminating in automation. Once automation is achieved, processing times and total resource visibility will be substantially improved.

- to Resources Required for Implementation: DAN M, TRAIN, and M_{\star}/A recommendity defining recommendations of part of objector atom. Recommendations will be part of DEFONCULY unitratives program.
- 7. Method of Implementation: AB 71-2, under revision and scheduled for release during 2d 4th FY82, will be supplemented by MA 70Ms to insupe that "row to" guidance recarding BOIP/QQPRI processing is available at worker level. Several related Army regulations such as AB 71-9 and AB 708-1 are also being aligned with the latest initiatives.
- 8. Relationship to Other Studies: kefinement of the BOIP/QQPRI processing system was recognized and well underway a year before this study. The recommendation to combine the BOIP and QQPRI is dependent on automation and was derived from a goal of the AMP Modernization Program. Both portions of the recommendation were considered within the DEPSECDEF initiatives program in order to gain interest and focus at MACOM level.
- 9. Relationship to Other Recommendations within publict study: The BOIP/QQFRI feed the acquisition process by quantifying requirements for equipment and personnel. Improvements to this portion of the process will impact on force modernization and system fielding.
- 10. Coordination: ODCSLOG, ODCSRDA, DARCOM, and TRADOC are working together on this initiative and concur.

TOPIC: THE ARMY AUTHORIZATION DOCUMENTS SYSTEMS (TAADS)

RECOMMENDATION NUMBER: 16

STUDY LOCATION (VOLUME-PAGE): 26-286

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDP)

1. Reference:

- a. Study of Army Logistics 1981, Annex D.
- b. Memorandum, DAMO-FDP, HQDA, January 1981, subject: Proposed Policy for Standardization of MTOE Units--DECISION MEMORANDUM.
- 2. Statement of Recommendation: "That HQDA enforce standardization and change procedures for authorization documents."
- 3. Rationale for Recommendation: Standardization and the disciplining of changes to The Army Authorization Documents System (TAADS) will improve the data used as the basis for procurement and will improve asset distribution.
- 4. Analysis of Recommendation: Implementation of recommendation began as a result of reference 1b, is ongoing, and will continue.
- a. The Office of the Deputy Chief of Staff for Operations and Plans is responsible for overall management of The Army Authorization Documents System (TAADS).
- b. One of the basic precepts of the standardization program is to restore discipline to the MTOE change process.
- c. Standardization will be accomplished in three phases, with actual unit reorganizations scheduled to be completed during FY 83 and FY 84 for units under series "H" TOEs. Units reorganizing under series "J" TOEs will standardize throughout the DIV-86/ARMY-90 transition period.

5. Benefits of Implementation:

- a. Standardization of MTOE requirements to TOE level 1 supports equipment procurement at minimum essential levels for sustained combat according to the latest doctrine and organizational designs as stated in basic TOEs.
- b. Standardization of MTOE requirements and authorizations for like-type units, at similar ALOs, facilitates equipment distribution and permits the comparison of units according to unit status report levels.

- 6. Resources Required for Implementation:
- a. Supervision and management of standardization will be achieved within existing resources.
- b. Standardization of MTOE units requires balancing units according to TOE levels. It also includes adjusting unit authorization levels as TOE changes are approved. Resources will be reviewed and adjusted within the PPBS.
- 7. Method of Implementation: Improved and more detailed review of unit MTOEs will be achieved using the existing staff structure and TAADS system.
- 8. Relationship to Other Studies: Standardization is a prerequisite of the Manning the Force effort, and of efforts to minimize change to MTOEs, and to provide resources required when applying TOE changes to appropriate unit MTOEs.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Standardization will contribute to stabilizing the force structure and should enhance the capability to audit rationale for major changes in procurement programs (#21).
- 10. Coordination: ODCSPER and ODCSLOG concur.

TOPIC: PERSONNEL MANAGEMENT

RECOMMENDATION NUMBER: 17

STUDY LOCATION (VOLUME-PAGE): 26-286

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MPA-CS)

- 1. Reference Study of Army Logistics 1981, Annex D, page D-14.
- 2. Statement of Recommendation: "Simplify and Stabilize the Personnel Management System."
- 3. Rationale for Recommendation: This recommendation is identified in the study in the area of management and organization initiatives. It is a broad statement with no additional documentation in the study to further define the recommendation. Current DCSPER initiatives by the Manning Task Force to coordinate and integrate a system from personnel acquisition through separation will increase stabilization and should satisfy the stated requirement.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing.
- a. In response to the Army leadership's concern about the effects of personnel turbulence on combat readiness, the Army is developing a concept for a new manning system.
- b. The objective is to keep soldiers together with their leaders in units longer so they can train and serve together.
- c. Since a major portion of the Army is deployed overseas, the system will use unit movement to meet commitments and return the unit to a stateside homebase.
- 5. Benefits of Implementation: Under this concept current Army policies/regulations will be changed to keep career soldiers and first-term soldiers together longer in units.
- 6. Resources Required for Implementation: N/A.
- 7. Method of Implementation: The policy regulation changes to establish the manning system will be completed in FY 82 with possible projection for the stabilization and rotation of 20 prototype units in FY 84-85.
- 8. Relationship to other studies: N/A.

- 9. Relationship to other Recommendations within this Study: None.
- 10. Coordination: Manning Task Force (DAPE-ZXB) concurs.

TOPIC: TOTAL ARMY ANALYSIS (TAA)

RECOMMENDATION NUMBER: 18

STUDY LOCATION (VOLUME-PAGE): 26-286

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDF)

- a. Study of Army Logistics-1981, Section 21.
- b. AR 71-11, Total Army Analysis (TAA) (Draft).
- 2. Statement of Recommendation #18: "Run TAA, rates/factors less frequently; allow analysis time."
- 3. Rationale for Recommendation: Annual changes in force structure, rates and factors have sometimes caused dramatic fluctuations in the Army Acquisition Objective (AAO). In addition, annual performance of the TAA study has left little time for needed supplementary force structure analyses.
- 4. Analysis of Recommendation: Recommendation has been implemented. The draft AR 71-11 governing TAA calls for the study to be placed on a biennial schedule. The rate /factors study has been changed to the same schedule.
- 5. Benefits of Implementation: A formal TAA study will be completed every other year instead of annually. This will allow more analyses to be completed in the year when the formal study is omitted. Less frequent rate and factor changes will reduce turbulence in the procurement arena.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: AR 71-11 is in the process of being approved in final form. The next formal study after TAA-88 will be TAA-90. The rates/factors study will be scheduled at the same time.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is consistent with recommendation No. 21b "Change force structure process to either a 2 or 3 year cycle."
- 10. Coordination: The draft AR has been staffed with all TAA GOSC representatives. The change to the rates/factors study has been staffed with the GOSC representatives. This paper has been coordinated with DAMO-RQ.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: AMMUNITION CONSUMPTION

RECOMMENDATION NUMBERS: 19 and 19B

STUDY LOCATION (VOLUME-PAGE): 21-14

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQL)

1. Reference:

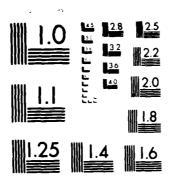
- a. Study of Army Logistics 1981, Annex D; Section 9; Section 5; and Section 21, pages 21-11 to 21-14.
- b. Department of the Army Pamphlet 700-16, "The Army Ammunition Management system," dated 15 February 1979.
- c. Army Regulation 710-8, Nonnuclear Ammunition Combat Rates, dated 3 January 1975.
- 2. Statement of Recommendation: No. 19 "Clarify ammunition consumption data." No. 19B "Actively promote an awareness and understanding of rates development and use."
- 3. Rationale for Recommendation: Recommendations 19 and 19% are based on the study finding that the various ammunition rates and their usage are misunderstood by Army planning and operational communities. The study found that inconsistencies exist among ammunition rates study results, Total Army Analysis results, and the ammunition rates used within the doctrinal community. Inconsistencies in ammunition requirement projections have caused a planning and operational dilemma.

4. Analysis of Recommendations:

- a. ODCSOPS (DAMO-RQL) has Army staff proponency for development of ammunition rates.
- b. Army Logistics Study 1981 concluded that the various rates (i.e., distribution, requirements, programing, FM 101-10-1, and SHAPE rates) serve needed planning purposes.
- c. The issue is to clarify the development of rates, not to change them or to make them congruent.
- d. This action can be initiated within the authority of the proponent (DAMO-RQL) for those rates developed by HQDA.
- e. FM 101-10-1 rates provide the basis for short-term (15 day) tactical planning. These rates are developed independently of the other rate studies, methodologies, and assumptions.



7		128 153 ASSIFIE	II ANALYSIS OF RECOMMENDATIONS(U) DEPUTY CHIEF OF STAFF										
	-												



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

- 5. Benefits of Implementation: Adoption of these recommendations improves the development of supporting ammunition organizational structure and doctrine and the understanding and credibility of ammunition data in the field. Clarification of ammunition rates data reduces the creation of "local" planning rates developed by the field.
- 6. Resources Required for Implementation: No additional resources are required. HQDA ODCSOPS (DAMO-RQL) sponsors ammunition rate studies (except for FM 101-10-1 and SHAPE rates) and provides guidance to USA Concepts Analysis Agency in its ammunition rates development process.
- 7. Method of Implementation: Recommendations 19 and 19B can be implemented by DAMO-RQL by the publication of a terse, layman-oriented description, discussion, and explanation of the purposes, assumptions, and procedures by which existing and planned HQDA-sponsored studies derive ammunition consumption data. Specific attention must be given to identification of the correct uses of the data available from each study.
- 8. Relationship to Other Studies: Conventional Ammunition Special Review (CASPR) found that DA ammunition rates were not understood and recommended that terse explanations be sent to major commands and that ammunition rates development be included in the curricula of the Command and General Staff college and senior service schools.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendations 19 and 19B are closely related to number 121, which recommended the development and promulgation of consistent ammunition consumption data, a prerequisite for the development of an ammunition unit force structure capable of performing the ammunition mission satisfactorily.
- 10. Coordination: ODCSLOG, CAA, and the ALA functional area point of contact for ammunition concur.

FUNCTIONAL AREA: Acquisition and Materiel Maagement

TOPIC: AMMUNITION CONSUMPTION RATES

RECOMMENDATION NUMBER: 19A

STUDY LOCATION (VOLUME-PAGE): 21-14

PROPONENT OFFICE: HQDA ODCSLOG (DALO-P;F)

- a. Study of Army Logistics 1/81, Section 21, pages 10-14.
- b. Conventional Ammunition Special Review (CASPR), July 1980.
- c. Letter, DALO-PLF, HQDA, 18 Dec 81, subject: Study of Army Logistics 1981.
- 2. Statement of Recommendation: "Investigate if rates published in FM 101-10-1 for tactical planning can be related to CAA developed rates."
- 3. Rationale for Recommendation: For the most part, the various ammunition rates and their usage are misunderstood by the Army planning and operational communities. The reconciliation of FM 101-10-1 and CAA developed rates would provide more consistent and timely rates data for short-term tactical planning.
- 4. Analysis of Recommendation:
- a. CDCSOPS, DAMO-RQL, has ARSTAF proponency for ammunition rates. CAA receives guidance in its ammunition rate development from ODCSOPS.
- b. TRADOC was requested to evaluate this recommendation and provide comments by 26 February 1982. CAC develops rates for FM 101-10-1.
- c. Log Study 81 concludes that the different rates serve needed purposes. The issue is to relate the rates of CAA to CAC's FM 101-10-1 rates, not to change the rates to make them congruent.
- 5. Benefits of Implementation: Development of a clear relationship between CAA rates and CAC rates (FM 101-10-1) would eliminate confusion throughout the Army.
- 6. Resources Required for Implementation: Little if any additional resources should be required to implement.
- 7. Method of Implementation: ODCSOPS, TRADOC, and CAA would develop a relationship between the rates.

- 8. Relationship to Other Studies This problem was covered in CASPR. CASPR (reference 1b) found the rates dewlopment process to be basically sound, but not generally understood by commanders and staff officers in the field. Therefore, CASPR recommended that procedures be established to brief major commanders and staffs on the method of determining the AAO and rates. DCSOPS, as the ARSTAF proponent for ammunition rates, has responded to the recommendation by working on development of theater specific SB 38-26 rates and writing of a planned "user's guide" explaining ammo rates development and use.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation is related o recommendations 19, 19B, and 121. ODCSOPS, DAMO-RQL, will implement this recommendation as part of the ongoing effort to respond to these three related recommendations.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA functional area point of contact for ammunition concur.

TOPIC: GRAVES REGISTRATION

RECOMMENDATION NUMBERS: 20, 20B, 20C

STUDY LOCATION (VOLUME-PAGE): 19-22

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TST)

1. Reference:

- a. Study of Army Logistics 1981, Section 19, pages 1-22.
- b. Concepts Analysis Agency Graves Registration (GRREG) Study, July 1981.
- c. Concepts Analysis Agency Combat to Support Balance Study, Vol X, Appendix K Services, September 1980.
- 2. Statement of Recommendation: "That adequate GRREG force structure be authorized and that authorized positions be filled with trained personnel." There are two supporting recommendations associated with this recommendation.
 - a. Recommendation 20b: "Continue current mortuary affairs program."
- b. Recommendation 20c: "Establish functional integrity for the mortuary affairs programs throughout the Army."

3. Rationale for Recommendation:

- a. The graves registration force structure today is largely unmanned. GRREG units in the divisions, where there is the most critical need, are not authorized for manning. Mobilization plans envision augmentation from a base of trained personnel. However, this base is virtually nonexistent due to the lack of authorized positions in the force structure.
- b. The mortuary affairs program is an umbrella term that embraces the four programs used to handle remains during both peace and war. It must be continued.
- c. GRREG line and staff responsibilities are now split between personnel and logistics. This situation requires clarification particularly regarding the command of GRREG units.

- 4. Analysis of Recommendation: Implementation of recommendation 20 and supporting recommendations 20b and 20c is ongoing and will continue.
- a. The Troop Support Division, Directorate of Transportation, Energy and Troop Support, as the DA staff elemnt responsible for GRREG, has recognized the shortcomings and has prepared an action Plan to resolve them. The Action Plan tasks specific agencies to accomplish specified tasks to overcome these and other problems, provides milestones and sets dates for completion.
- b. The Mortuary Affairs Program is defined as the recovery, identification, care, and disposition of receased persons for whom the Army is responsible. This term includes the four programs used to handle remains during both peace and war. It is obvious that the Mortuary Affairs Program should continue without interruption.
- c. Graves registration units do not have functional integrity in their command and control relationships. Doctrine now has GRREG as a G-1 (Personnel) function in tactical organizations and a logistics function in logistics organizations. The redesignation of GRREG as a logistics function will undoubtedly result in future realignment of these relationships.
- d. The annual Total Army Analysis Force Structure Conference provides a forum for evaluating GRREG force structure requirements with other Combat Service Support demands.
- e. USAREUR has discussed and Eighth Army plans to initiate a cross training program whereby unit personnel are trained in GRREG skills. This approach assures support in the event MOS-trained personnel are not available.
- 5. Benefits of Implementation: Force structure authorization will provide:
 - a. Justification for increased training.
 - b. Opportunities for career development and retention.
 - c. The trained base of personnel required for mobilization.
- 6. Resources Required for Implementation:
- a. Division 86 authorizes three GRREG NCOs (MOS 57F) in the Supply and Service Company and one in the headquarters of the Supply and Transport battalion. These will be a cadre to train other division personnel in their GRREG responsibilities for recovery and identification.
- b. A mini-round-out approach is being considered for nondivision elements utilizing Reserve Component (RC) GRREG units who train with and would mobilize with Active Component units. No additional spaces would be required.

7. Method of Implementation:

- a. The Division 86 approach is already approved.
- b. The mini-round-out approach will require USAR and NGB approval.
- 8. Relationship to Other Studies: Reference 1b and 1c provided similar recommendations to insure the availability of trained personnel early.
- 9. Relationship to Other Recommendations within the Study of Army Logistics-1981: None.
- 10. Coordination: ODCSOPS concurs.

ADDED INFORMATION - Nov 82

Round out approach mentioned in para 6.b. and 7.b. was not adopted because it would effect manpower requirements in both the AC and RC.

FUNCTION AREA: Structure

TOPIC: FIELD SERVICES ORGANIZATION/FUNCTIONS

RECOMMENDATION NUMBER: 20A

STUDY LOCATION (VOLUME-PAGE): 19-22

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- a. Study of Army Logistics 1981, Section 19, pages 1-22.
- b. Letter, DALO-PLF, HQDA, 28 Dec 81, subject: Study of Army Logistics 1981.
- 2. Statement of Recommendation: "Further study of field services organization and functions is required."
- 3. Rationale for Recommendation: Further study is needed in order to evaluate the role of the multi-functional field service company (GS) in providing support to the division.
- 4. Analysis of Recommendation: The recommendation has been implemented. TRADOC is currently conducting a study of field services organization and functions as a part of the combat service support mission area analysis (CSS MAA) which should be completed in the December 1982 time frame.
- 5. Benefits of Implementation: The outcome of this analysis should be the development of a functional service organization that facilitates tailoring in the host nation/commercial support environment.
- 6. Resources Required for Implementation: For the study, none other than those committed to TRADOC's CSS MAA. There is a possibility that the CSS MAA may result in either increased or decreased resources in the field service organization.
- 7. Method of Implementation: The study has been implemented as part of TRADOC's CSS MAA.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: ODCSOPS, TRADOC, and ASA(IL&FM) concur.

FUNCTIONAL AREA: Structure

TOPIC: FORCE STRUCTURE

RECOMMENDATION NUMBERS: 21, 21A, 21B

STUDY LOCATION (VOLUME-PAGE): 4-48 thru 4-53, 5-136, 26-286

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDF)

1. Reference:

a. Study of Army Logistics - 1981, Sections 4 and 5.

b. Letter, DAMO-FD, HQDA, 13 February 1981, subject: Organizational Standardization of MTOE units.

2. Statement of Recommendations:

- a. (21) Make changes to the force structuring process.
- b. (21a)Discipline the force change process.
- c. (21b)Change force structure process to either a two or three year cycle.
- 3. Rationale for Change: Changing the cycle will contribute to stabilizing the force structure, sustainability and funding guidance and will discipline the force structure change process.
- 4. Analysis of Recommendation: Recommendation 21b has been accepted and accomplished; AR 71-11 which governs TAA places the study on a biennial schedule. A discussion of TAA frequency is also contained in Recommendation 18. Discussion of Recommendations 21 and 21a are directed towards that portion of force structuring associated with documenting changes to authorization documents and standardization of MTOE units.
- a. The majority of changes to authorization documents supporting the force structure are administrative. They are qualitative, in terms of personnel skills and qualifications and in terms of definition of equipment (LINs), but are not quantitative in that they do not increase or decrease the demand for resources. These must be captured in documents during the semi-annual authorizations update cycle to assure timely training and asset distribution.



- (1) Types of changes captured in the semi-annual cycle are: administrative-asset classification, TOE changes, implementation of Troop Program Guidance changes, and manpower allocations from POM budget process.
- (2) Decrements to the force structure must be captured as early as possible to assure timely redistribution of resources to reduce unit shortfalls and preclude unnecessary procurement. The semi-annual cycle provides a discipline for conducting changes in a systematic fashion by requiring changes to be submitted in two management of change (MOC) windows of three months each. This cycle appears to be working well.
- b. The ongoing program for standardization of MTOE units is intended to reduce change to a minimum and to align all tactical units to a base TOE. Reference 1b establishes a program for implementing TOE standardization within TOE units.
- 5. Benefits of Implementation: Recommendations 21 and 21a provide for stabilization of unit organizations, reduce number of changes to unit authorizations and provide opportunities to review documentation throughout the force structure.
- 6. Resources Required for Implementation: The recommendations are within the capability of existing resources.
- 7. Method of Implementation: Documented changes are captured during two MOC windows scheduled semi-annually. This program is ongoing. Standardization of MTOEs is time-phased per reference 1b and is ongoing.
- 8. Relationship to Other Studies: The Management of Change Study (1977), Implementation of Change Study (1980) and MTOE Standardization Program (1981) have all recognized the problems of force structure turbulence and have generated improvements within the system.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: The recommendation is influenced by the recommendation to enforce standardization and change procedures for authorization documents (#16) and Recommendation #18 "Run TAA, rates/factors less frequently".
- 10. Coordination: ODCSLOG, ODCSPER concur.

FUNCTIONAL AREA: Structure

TOPIC: AMMUNITION STORAGE AREA

RECOMMENDATION NUMBERS: 24, 24A, and 24B

STUDY LOCATION (VOLUME-PAGE): 21-54

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

1. Reference:

- a. Study of Army Logistics 1981, Section 21, and Annex D.
- b. Letter, HQDA, DALO-PLF, 28 Dec 81, SAB.
- 2. Statement of Recommendations: "Provide an intransit ammo storage area in close proximity to port discharge operations with a capability to: segregate ammo by type and lot; marshal trains or convoys for throughput; and interface with ammo managers at TAMMC. Ammunition units operate the intransit storage area." (This is a verbatim statement of recommendations 24, 24A, and 24B).

3. Rationale for Recommendations:

- a. Current doctrine is not specific in the assignment of responsibilities for ammunition flow through the port.
- b. The Munitions System Support Structure (MS3) Study recommended that an Ammo Staging Area Company be assigned this mission. A separate TOE was created for this unit, but was subsequently disapproved by HQDA. The resultant void has not been filled.
- c. A Terminal Service Company was considered, but it lacks the resources to simultaneously operate both a port discharge operation and an intransit ammo storage area.
- d. It is unrealistic to assume sufficient throughput transportation will be available to continuously clear ports.

4. Analysis of Recommendations:

a. In November 1980, HQDA stated: "The proposed ammunition port staging company duplicates the responsibility of the current port operating organization and is not recommended for approval. Full implementation of MS3 will be addressed in future Total Army Analysis (TAA) and will be programed within available manpower resources."

- b. Analysis of these recommendations confirmed the existence of doctrinal void, as stated in the rationale for these recommendations. When HQDA disapproved the TOE for an Ammo Port Staging Company, that action had the effect of masking the issue of how to solve the port clearance problem for ammunition. The Ammo Port Staging Company was but one possible answer to the port clearance problem. Another answer was additional transportation elements augmented with ammunition personnel. In the press to publish MS3 doctrine, the Ammo Port Staging Company was deleted because of HQDA disapproval, but the alternative solution was not explored or articulated within the published doctrine. This is the void of which Study of Army Logistics 81 speaks.
- c. To summarize, we have affirmed the validity of the underlying problem which caused these recommendations to be made. The recommendation to provide an intransit ammo staging area in close proximity to the port (Recommendations 24 and 24A) should be adopted. Recommendation 24B, which cal for ammunition units to operate the intransit storage cargo area, should be least partially adopted in that it is recognized that some augmentation by a personnel will in any event be necessary.
- 5. Benefit of Implementation: Implementation will eliminate correct void in doctrine for ammunition service in the theater of operation. I will insure that ports are cleared in such a way as to provide responsive copply support to forward ammunition supply points in a wartime environment.
- 6. Resources Required for Implementation: The resources required for implementation cannot be precisely determined until a final analysis by the CSSMAA is completed.
- 7. Method of Implementation: Agencies involved in the formulation of conventional ammunition combat service support doctrine (TRADOC, LOGC, MMCS) are examining this issue as part of the Combat Service Support Mission Area Analysis (CSSMAA) Study which is to be published in December 1982.
- 8. Relationship to Other Studies: A series of studies recommended the immediate implementation of MS3 doctrine (CASPR, AITF, CSBS). Since these studies considered MS3 before DA recommended eliminating the ammo port staging company, it is implicit that their recommendations to implement MS3 supports the Log Study 81 recommendation for providing an intransit ammunition storage area.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics -1981: The three related recommendations, 24, 24A, and 24B, have been considered in this memorandum. There are no other related recommendations.
- 10. Coordination: ODCSOPS, TRADOC, and the ALA functional area point of contact for ammunition concur with this memorandum.

TOPIC: LOGISTICS OVER THE SHORE (LOTS)

RECOMMENDATION NUMBER: 25

STUDY LOCATION (VOLUME-PAGE): 18-67, 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSM)

1. Reference:

- a. Study of Army Logistics 1981, Section 18, pages 53-60.
- b. USA Trans-Hydro Craft Study 1975-1985, 1 Dec 73.
- c. Army Watercraft Requirements Master Plan, approved 20 Apr 81.
- 2. Statement of Recommendations: DA should-
 - a. retain terminal service/watercraft forces;
 - b. support procurement of new watercraft;
- c. press Navy for commitment of Temporary Container Discharge Facility (TCDF).
- 3. Rationale for Recommendations:
- a. Army terminal service and waterc aft units are required to support NATO and RDF scenarios.
 - b. New watercraft must be procured to replace the outdated Army fleet.
- c. Although the Army and Navy have discussed Army use of the Navy TCDF, the Navy has not yet formally committed itself to the Army. The Navy has programed in their POM procurement of Army TCDF requirements.
- 4. Analysis of Recommendations: Implementation of the recommendations is ongoing and will continue.
- a. The Strategic Mobility Division, Directorate for Transportation, Energy and Troop Support, is the Army Staff functional proponent for all transportation resourcing actions, including terminal service and watercraft units.
 - b. Procurement of new watercraft is planned:
- (1) Watercraft Program Development Increment Package (PDIP) 4S3C is programed in POM 83-87 to procure watercraft during FY 85-87.

- (2) Congress appropriated \$27.3M in FY 82 to procure the first platoon (four craft) of the second LACV-30 company. Program Budget Decision number 109C dated 9 Jan 82 provides \$60.0M in FY 83 to procure the eight additional LACV-30 craft required to equip the company.
- (3) A functional PDIP covering all aspects of Logistics-Over-the-Shore (LOTS) operations will be submitted during POM 84-88.
- c. The Navy has programed procurement of five TCDFs (less ship hulls) for the Army in the Navy's five-year development plan. Discussions between Army and Navy on manning and operational control of hull-based TCDFs continue.
- 5. Benefits of Implementation: Improved LOTS capability will enable the Army to support deployed forces in RDF scenarios.
- 6. Resources Required for Implementation:
- a. The Strategic Mobility Team can implement the recommendations in the study.
- b. USA Materiel Development and Readiness Command (DARCOM) is considering a proposal to upgrade the Project Office for Amphibians and Watercraft, USA Troop Support and Readiness Command, to Project Manager status. No additional manpower requirements are anticipated at this time.
- 7. Method of Implementation:
 - a. Watercraft PDIP 4S3C is programed in POM 83-87.
 - b. Functional PDIP will be submitted for POM 84-88.
- 8. Relationship to Other Studies: The Trans-Hydro Study (1973) and the Army Watercraft Requirements Master Plan (1981) recognized the requirement to modernize and upgrade the Army's terminal service and watercraft capabilities. The Master Plan is updated biannually.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: These recommendations are not influenced or paced by another recommendation within the study.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM (TSARCOM), TRADOC, and USN (NOP-40) points of contact for Logistics-Over-the-Shore (LOTS) concur with these recommendations.

ADDED INFORMATION - Nov 82

PDIP 4S3C has been rolled into functional PDIP FP4H which is programed in POM 84-88.

TOPIC: CONTAINERIZATION

RECOMMENDATION NUMBERS: 26 at. 135

STUDY LOCATION (VOLUME-PAGE): 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSP)

1. Reference:

a. Study of Army Logistics - 1981, Annex D, page 16, and Section 18, pages 114-126.

- b. Memorandum, DALO-TSM, 28 Sep 81, subject: Ship Requirement Study Recommendation.
- c. Memorandum, DALO-TSP, 23 Mar 82, subject: Containerization Planning Guidance.

2. Statement of Recommendations:

- a. Recommendation number 26: "Implement standardized containerized cargo planning assumptions."
- b. Recommendation number 135: "Direct MACOMs develop time-phased capability to handle prescribed level of containerization."

3. Rationale for Recommendations:

- a. The rationale for recommendation number 26 is that SEALOC transportation support for each theater should be specified over the program years in terms of percent containerization so that force structure and containerization plans can be adjusted and that containerization planning factors be developed which state by program year and by theater and/or OPLAN what percent of cargo would be shipped by container.
- b. The rationale for recommendation number 135 is that although the Army in the field is being equipped for containerization, the ability to transition to war needs examination. It stated that positioning of container-related equipment needs to be in consonance with an established plan prescribing the level of containerization that will be provided to the oversea command.

4. Analysis of Recommendations:

a. Both study recommendations have obvious merit, as there presently exists no mechanism which provides long-range containerization planning guidance.

- b. Theater containerization policy is now specified by the supported CINC, who, through the Joint Operation Planning System, can specify in the OPLAN containerization levels by class and sub-class of supply for non-unit resupply requirements. The level of containerization is then refined through the TPFDD process. This, however, is near term oriented and cannot be used as a basis for future planning.
- c. The study recommendations take the reverse approach, that for planning purposes, a prescribed level of containerization be determined based on SEALOC availability through the outyears by theater and the capability to reach that level be achieved.
- d. The level of containerization is dependent upon the mix of sealift resources, container, breakbulk, and roll-on/roll-off, the strategy and the theater. The sealift fleet is changing, trending towards increasing numbers of containerships. Consequently, the Army's ability to sustain its forces will become increasingly dependent upon its capability to maximize utilization of these vessels. The projection of future SEALOC containerization support requires consideration of Service and DLA requirements and as such must be accomplished within the joint community.
- e. In reference 1b, ODCSLOG requested the OJCS J4 undertake a joint study to assess sealift requirements/capabilities by Service for various scenarios, and to project trends in type requirements/capabilities and identify corrective action.
- f. In reference 1c, ODCSLOG requested OJCS J4, as a follow-on to the sealift capabilities/requirements study, to develop long-range containerization planning guidance by theater to be used by the Services as a benchmark in developing container capability. The development of this planning guidance by the joint staff will allow the Army to implement these recommendations.
- 5. Benefits of Implementation: Implementation of these recommendations will provide Army planners and decision-makers a basis for developing a long-range container capability.
- 6. Resources Required for Implementation: Cannot be determined at this time.
- 7. Method of Implementation: Implementation will occur through exercising joint planning guidance and resourcing container capability through the PPBS.
- 8. Relationship to Other Studies: N/A.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: These recommendations are related, but not paced by, recommendation number 131, "Exploit container systems in wartime." The Army is developing a wartime container capability but lacks the long-range containerization goals that implementation of these recommendations would provide.
- 10. Coordination: ASA(IL&FM) and ODCSOPS concur.

TOPIC: INTEGRATED LOGISTICS SUPPORT/INTEGRATED SYSTEMS SUPPORT

RECOMMENDATION NUMBERS: 27 & 27A

STUDY LOCATION (VOLUME-PAGE): 26-286, 9-181

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FM)

1. Reference:

- a. Study of Army Logistics--1981, Annex D; Section 5, 9, and 26.
- b. Memorandum, DACS-ZD, 16 Oct 81, subject: Management of Modernization.
- c. Letter, HQDA, 10-81-2, 25 Nov 81, subject: Army Force Modernization Coordination Office (AFMCO).
- d. Letter, DACS-DP, 10 Nov 81, subject: Report on 1981 Army Commanders' Conference.
 - e. Letter, DAMO-FM, 5 May 82, subject: Supportability Assessments.
- 2. Statement of Recommendations: Establish Integrated Logistics Support (ILS) and Integrated Systems Support (ISS) Responsibilities.
- 3. Rationale for Recommendation: The study found that many elements within the ARSTAF, DARCOM, TRADOC, MTMC, etc., were engaged in ILS related functions and that a degree of overlap existed. Within the ARSTAF, ILS belonged to ODCSLOG but functional responsibility for some ILS elements resided in other Army Staff agencies. Study recommendations were to reduce the scope of ILS to purely logistic functions with the DCSOPS becoming the integrator of total systems support; a process to be called Integrated Systems Support (ISS).

4. Analysis of Recommendation:

- a. ILS and ISS responsibilities have been reviewed since the Army Logistics Study. The concept of ISS as an umbrella for monitoring all elements of a given system, with responsibilities in ODCSOPS, was ratified at the 1981 Army Commanders' Conference (Ref 1d). The associated recommendation to reduce the scope of ILS has not and will not be implemented. ILS responsibilities have been codified in the revised AR 700-127 (Logistics-Integrated Logistics Support) now pending publication.
- b. Revised AR 700-127 provides adequate guidance for the definition and implementation of ILS under the proponency of the DCSLOG.

- c. ISS responsibilities are outlined in a draft HQDA Ltr now being staffed. Draft HQDA Ltr cites the AFMCO charter (ref 1c) which directs AFMCO to manage the force modernization process within the designs of the emerging ISS concept, defines ISS, and outlines how the concept is currently being operationalized in the Force Modernization Master Plan.
- 5. Benefits of Implementation: The revised AR 700-127 will enable all ILS participants to effectively coordinate their participation in an efficient manner. The ISS concept, as it is being initiated through the Supportability Assessment portion of the FMMP (ref 1e), provides for an expanded number of assessment elements in the conduct of "vertical" system assessments and incorporates a much needed "horizontal look" by functional proponents for the systems being assessed.
- 6. Resources Required for Implementation: ILS continues to be implemented with existing resources. ISS is being currently initiated as a HQDA management procedure. Funds are provided through the appropriations which support the Army Staff.
- 7. Method of Implementation: ILS responsibilities can be found in AR 700-127. Implementation of ISS has begun with the Supportability Assessment process incorporated in the FMMP. A proposed HQDA letter providing direction and establishing responsibilities for implementation of the ISS concept is being staffed.
- 8. Relationship to Other Studies: The Inspector General (TIG) is conducting "a special inspection of the Army's systems to equip and reequip the force, to manage total force modernization, to accomplish total systems fielding, and to distribute new and displaced equipment." The inspection will be completed June 1982.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics--1981: This recommendation is not influenced or paced by other recommendations within the study.
- 10. Coordination: The Office of the Deputy Chief of Staff for Logistics and the Assistant Secretary of the Army (Installations, Logistics and Financial Management) concur.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28A

STUDY LOCATION (VOLUME-PAGE): 5-138

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference Study of Army Logistics - 1981, Section 5, Page 5-138.

- 2. Statement of Recommendation: "Expand modernization efforts to recognize redistribution as a necessary part of ILS."
- *3. Rationale for Recommendation: The process of force modernization is difficult at best. Because of this difficulty, redistribution as a result of force modernization displacement has not been managed or controlled at DA level. This creates the same training, personnel, and logistics problems that are prevalent with uncontrolled new system modernization. Applying Integrated Logistic Support (ILS) to redistribution will help control and manage the logistics process.

4. Analysis of Recommendation:

- a. Efforts to manage redistribution have started. The Army Modernization Information Memorandum (AMIM) has given increased attention to displacement and redistribution each year and is continuing refinement in this area.
- b. The Force Modernization Milestone Reporting System (FMMRS), a product of the ILS Milestone Reporting System, has also started milestone reporting on displaced systems reported in the AMIM.
- c. ODCSLOG, as part of its effort to improve management of displaced systems is incorporating redistribution of displaced systems into its ILS regualtion and programs. This effort is ongoing and when completed will accomplish the recommendation.
- 5. Benefits of Implementation: The major benefit in tying redistribution into ILS will be prior support planning for redistributed systems. The current system has no effective mechanism or vehicle to use for redistribution planning. ILS can be that vehicle.

- 6. Resources Required for Implementation: Program under development by ODCSLOG is not envisioned to require additional resources. Actions that are required as a result of incorporating redistribution into ILS should be accomplishable with current resources. This includes such actions as material transfer plans and ILS analysis.
- 7. Method of Implementation: Proposed changes to AR 700-127, Integrated Logistic Support, were incorporated into a draft and sent out worldwide for comments on 8 Feb 82. Comments have been received and are being reviewed. Upon completion of the review and resolution of the comments, the approved revision of AR 700-127 will be sent to TAG for edit and publication.
- 8. Relationship to Other Studies: None known.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation will be affected by recommendations 28B, C, D, E and G, however its development and progress can continue independently.
- 10. Coordination: AFMCO concurs.

TOPIC: INTEGRATED LOGISTIC SUPPORT (ILS)

RECOMMENDATION NUMBER: 28B

STUDY LOCATION (VOLUME-PAGE): 9-181

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation in full.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, page 9-180.
- (2) AR 700-127.
- (3) DCSLOG Regulation 10-1, Mission and Functions.
- b. Statement of Recommendation: "(That) ILS program responsibility remain with DCSLOG; (that) ILS be elevated to a directorate; ILS director will coordinate all HQDA ILS actions (DCSPER, DCSOPS, DCSRDA, AFMCO); (that) civilian SES be established as the director."
- c. Rationale for Recommendation: The study revealed a need for high level management of ILS on the ARSTAF with commensurate visibility to organizations and activities below ARSTAF level. The emphasis of the recommendation was directed toward the creation of an organizational entity exclusively devoted to ILS.
 - d. Analysis of Recommendation:
- (1) The recommendation that ILS program management remain within ODCSLOG is appropriate and will continue to be executed IAW the provisions of reference a(2).
- (2) The present staffing levels within ODCSLOG are not sufficient to support a separate ILS directorate.
- (3) The management of ILS received deliberate attention in the reorganization of the Supply and Maintenance Directorate, ODCSLOG, which was effected on 15 September 1981. This reorganization established five (5) commodity offices within the S&M Directorate responsible for life cycle management of assigned systems. The ILS policy and guidance function was retained in the ILS and Modernization Division.

- (4) This organization lines up well with the DARCOM ILS commodity management scheme and with the TRADOC centers and schools.
- (5) By decentralizing ILS management along commodity lines, a closer relationship with ILS offices and managers at the materiel readiness/development commands within DARCOM was established.
- (6) The reorganization also effectively caused ILS management to be executed in a more pervasive manner within the Supply and Maintenance Directorate with the director as the overall focal point. Therefore, in operation (but not by organizational title), the decentralized ILS management scheme created a higher intensity of management attention.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. No other agency concurrence is required concerning this memorandum.

3. Recommendation:

- a. Do not adopt the study recommendations insofar as the establishment of a separate ILS directorate with SES leadership is concerned.
- b. Continue to pursue the decentralized ILS management scheme established in the Supply and Maintenance Directorate reorganization of September 1981.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28C

STUDY LOCATION (VOLUME-PAGE): 9-181

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, page 9-181.
- (2) AR 700-127.
- (3) DODD 5000.39.
- b. Statement of Recommendation: The scope of the ILS program will be reduced to only the pure logistics functions:

oo Maintenance

oo Software

oo Supply

oo Packaging

oo Spt Equip & TMDE

oo Transportation

oo Tech Data

oo Design Influence

- c. Rationale for Recommendation: The study related the reduction in scope of ILS with the recommendation that a management process to be called ISS (Integrated Systems Support) be established under the aegis of ODCSOPS. This process would include the current ILS process as a supporting element and insure that ARSTAF functional managers are responsive to the management demands of modernization.
 - d. Analysis of Recommendation:
- (1) The ILS elements delineated in reference 2a(2) implement the DOD policies of reference 2a(3).
- (2) ILS is practiced at the program management (and defense contractors) level as a unified process to insure the maximum degree of system supportability within the Army's resource constraints.

- (3) Each element of ILS is inextricably interrelated with other elements and cannot be viewed in isolation. For example, the maintenance element cannot be assessed without detailed visibility of personnel, training, and facilities impacts.
- (4) The constriction of ILS management to the elements cited would not provide for unity of effort at the "doer" level and would severely delimit the capability of ILS managers to exercise the life cycle management role which is inherent to the ILS process.
- (5) The ILS process fits well into the vertical management scheme for Army material systems and contributes in an integral manner into the horizontal management process to which ISS is evolving.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to the low cost/no cost recommendation to establish ISS and ILS responsibilities within ODCSOPS and ODCSLOG, respectively. While the ARSTAF functional roles will require fine-tuning, the programmatic content of the current ILS process is not expected to be revisited.
 - g. ODCSOPS concurs.

3. Recommendation:

- a. Do not adopt the study recommendation to limit the scope of ILS.
- b. Continue to establish specific ISS and ILS functional ARSTAF responsibilities.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28D

STUDY LOCATION (VOLUME-PAGE): 9-191

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

- a. Reference:
 - (1) Study of Army Logisites 1981, page 9-181.
 - (2) AR 700-127.
- b. Statement of Recommendation: "The combat and materiel developer roles in weapons system support remain unchanged, except that DARCOM will be the ILS manager throughout the LCMM. TRADOC will still perform ILS action prior to Milestone I, but they will input them to a DARCOM ILS manager."
- c. Rationale for Recommendation: The rationale for this recommendation was centered around the perceived difficulty in transitioning ILS "management" responsibilities on or about Milestone I from TRADOC to the designated DARCOM program manager (PM). The recommendation was also prompted by a lack of clear definition concerning the "front-end" ILS work that should be accomplished in the concepts phase.
 - d. Analysis of Recommendation:
- (1) AR 700-127, 1 May 1981, was shortsighted in its approach to "front-end" ILS management in that the various roles were not adequately defined and the ILS relationships to the overall systems management process in the concepts phase were not well thought out.
- (2) The tasks associated with the concepts phase of the acquisition process is generally accomplished under the direction of Special Task Forces (STF) chartered by the ODCSOPS or Special Study Groups (SSG) chartered by the Commander, TRADOC. Through the designation of STF directors and SSG chairpersons, the combat developer is clearly in the lead role. In order to maintain the emphasis upon the development and evaluation of alternative support concepts and upon the performance of required Logistic Support Analysis (LSA) tasks, the STF/SSG leadership must be charged with overall accomplishment of ILS-related matters. The current AR 700-127 did not recognize the STF/SSG role but placed ILS "management" responsibility upon the combat developer organization as a corporate body.

- (3) The STF/SSG membership should include an "ILS coordinator" (from the combat developer organization) who would form an ad hoc ILS management team to facilitate the accomplishment of ILS-related tasks. The materiel developer (MD) would provide membership to this group and the designated MD representatives would ideally be the ILS manager (ILSM) designee).
- (4) This ILS-in-the-concepts-phase approach is currently being incorporated into the revised AR 700-127 which is currently being staffed. While some of the details are to be resolved the general concept is deemed valid and will best serve to insure viable "front-end" ILS work involvement in the acquisition process.
- (5) A complete revision to MIL STD 1388 (Logistics Support Analysis) is currently being formulated which will define the required concept phase ILS tasks. This document along with AR 700-127 will provide the framework within which the "front-end" ILS work is to be accomplished.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. DARCOM and TRADOC concur.

3. Recommendation:

- a. Do not adopt the study recommendation which places the materiel developer as the "ILS manager" during the concepts phase.
- b. Continue to effect revision to AR 700-127 which accurately reflects the proper ILS interaction in the concepts phase, recognizes the role of STF/SSG activities and continues the essential lead role of the combat developer organization prior to assumption of overall program management by the MD or PM on or about Milestone I.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28E

STUDY LOCATION (VOLUME-PAGE): 9-182

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference:

- a. Study of Army Logistics 1981, Section 14.
- b. DARCOM Study, "Evaluation of the Packaged Shipment of Initial Supply Support ASL/PLL Items," July 1981.
- 2. Statement of Recommendation: Perform a limited test of full push-package concept for ILS.
- 3. Rationale for Recommendation: The point at which a new end item was supportable in the field in terms of repair parts support was difficult to determine with the existing piece part pull requisitioning system.
- 4. Analysis of Recommendation: Recommendation 28E has already been implemented.
- a. The tested concept is not push, but a consolidated pull with full knowledge of the contents of the package on the part of the gaining command prior to shipment.
- b. The reference 1b study tested the concept on the Improved TOW Vehicle (ITV) and concluded the packaging concept was feasible and recommended implementation.

5. Benefits of Implementation:

- a. Separation of provisioning workload from the normal supply system workload at the DSU.
 - b. Shorter fielding times for new equipment.
 - c. Enhanced visibility and control of provisioned items.
 - d. Better utilization of transportation assets.
 - e. Quicker reimbursement of wholesale stock fund.
- f. Less time required for monitoring the present fill of ASL/PLL initial support.

- 6. Resources required for implementation:
 - a. FY 82: \$2.9 million (OMA funds).
- b. FY 83-86: Approximately 175 people and \$5.4 million to absorb increased end item workload (about 240 new items).
- c. The FY 83 program is funded. The FY 82 requires a DARCOM submission of an out of cycle request.
- 7. Method of Implementation: Gradual introduction of new concept, with M1 tank and Blackhawk helicopter now provisioned using this concept.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recomendations within the Study of Army Logistics 1981: This is part of a blanket recommentation (28) to amplify ILS responsibilities.
- 10. Coordination: DARCOM concurs.

FUNCTIONAL AREA: Training

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28F

STUDY LOCATION (VOLUME-PAGE): 9-184

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation in full.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, page 9-184.
- (2) AR 700-127.
- b. Statement of Recommendation: DARCOM and TRADOC jointly develop an Integrated Logistic Support (ILS) course for key personnel with common core curriculum and separate modules for TRADOC and DARCOM peculiar subjects.
- c. Rationale for Recommendation: The study recognized the need to include the combat developer in the existing material developer's ILS training program.
 - d. Analysis of Recommendation:
- (1) TRADOC, as well as DARCOM, is a key player in the ILS process. This fact is recognized in AR 700-127 on ILS.
- (2) There is a valid need to provide appropriate ILS training for both TRADOC and DARCOM personnel.
- (3) ALMC limitations in instructor personnel necessitates the incorporation of TRADOC ILS training requirements into existing ILS courses.
- (4) Most TRADOC ILS subjects would also be appropriate for DARCOM personnel and vice versa.

- (5) An integrated training program of instruction (POI) without separate modules, would improve the DARCOM/TRADOC interface and mutual understanding of ILS roles.
- (6) A joint DARCOM/Logistics Center Work Group is currently developing an integrated POI to incorporate TRADOC ILS requirements into the ALMC FY 1983 training program.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations Within the Study of Army Logistics 1981: None.
 - g. DARCOM, TRADOC and OASA(IL&FM) concur.

3. Recommendation:

- a. Do not adopt the study recommendation as it pertains to developing separate modules for TRADOC and DARCOM peculiar subjects.
- b. Continue to develop an integrated POI which incorporates TRADOC ILS requirements into the ALMC FY 1983 ILS training program.

TOPIC: MILESTONE REPORTING SYSTEM (ILSMRS)

RECOMMENDATION NUMBER: 28G

STUDY LOCATION (VOLUME-PAGE): 9-186

PROPONENT OFFICE: HQDA ODCSLOG(DALO-SML)

- 1. Reference: Study of Army Logistics 1981, Section 9, page 9-186.
- 2. Statement of Recommendation: "Improve the present milestone reporting system (ILSMRS) by:
 - o Identifying 10-20 "Key, Go-No-Go" Thresholds.
 - o Perform quality reviews for these thresholds.
- o Apply basic "PERT" methodology (assess impacts of slipping milestones)."
- 3. Rationale for Recommendation: The detail and complexity of the Integrated Logistic Support Milestone Reporting System (ILSMRS) data as a whole does not lend itself to management use. Identifying key Go-No-Go milestones which can be used to monitor a systems's development and fielding will enhance ILSMRS useabilty for management.
- 4. Analysis of Recommendation: Analysis of recommendation is ongoing.
- a. DARCOM has identified 28 ILSMRS Force Modernization Milestone Reporting System (FMMRS) milestones considered critical to materiel system fielding. A review program has been initiated to assess the status of these milestones on specific AMIM long and short form systems. The review program is structured to "look forward" as the emphasis will be on future events rather than past problems. A major objective is to uncover future problem areas in advance.
- b. As a parallel effort, DARCOM has initiated an ILSMRS/FMMRS milestone analysis effort. All milestones will be analyzed for essentiality; relationship to other milestones, and/or specific actions; short and long range implications if the milestone is slipped; and, if the milestone is not accomplished when planned, identification of alternatives and the cost impact to the Army.

- 5. Benefits of Implementation: Identification of key, Go-No-Go threshold milestones will enhance ILSMRS utilization as a management tool. A further benefit possibility exists of reducing the current amount of reporting if non-key milestones can be reduced or eliminated.
- 6. Resources Required for Implementation: No requirements have been identified.

7. Method of Implementation:

- a. The first quality review will take place during the period 4-6 May 82 at the USA DARCOM Materiel Readiness Support Activity (MRSA), Lexington, KY. The results of this review will provide the framework for further reviews and implementation.
- b. A number of the DARCOM subordinate commands are already employing PERT methodology to manage their acquisition schedules; however, due to the diverse acquisition strategies of these commands, an overall PERT process for DARCOM may be difficult to obtain. Using the results of the milestone analysis effort, and the resulting smaller number of milestones, a management critical path type methodology will be considered.
- 8. Relationship to Other Studies: None known.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is closely related to recommendations 28A, B, C, D, and E.
- 10. Coordination: OASA(IL&FM) and DARCOM concur with this memorandum.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28H

STUDY LOCATION (VOLUME-PAGE): 9-186

PROPONENT OFFICE: HQDA ODCSLOG (DALO-RMP-M)

- 1. Reference Study of Army Logistics 1981, Section 9 of 28, Integrated Logistics Support.
- 2. Statement of Recommendation: "That DA DCSLOG and DCSPER investigate the establishment of:
- a. An additional skill identifier (ASI) code for military personnel and positions involved in Integrated Logistic Support (ILS) functions.
- b. An ILS civilian career field to include charging a new SES position for ILS with civilian career management responsibilities."
- 3. Rationale for Recommendation: The study states that the characteristics of an Army ILS "person" in ILS management offices Army-wide normally result in a transfer from functional areas such as supply or training, with individuals who have a narrow perspective of ILS. Civilian grades vary from GS-7 to GS-15 with no SES ILS positions. Tenure of individuals in ILS is normally less than three years, with expectation that they must return to their primary functional areas to remain competitive in their major career fields. It cited the same basic problems for military and civilians in ILS; i.e., no career progression, no specialty code, and no "godfather."
- 4. Analyses of Recommendation: Recommended study has been initiated and is continuing on a dual approach.
- a. ODCSLOG, in coordination with the Army Secretariat and ODCSPER, has a current initiative to develop a capstone career program for civilian logisticians, knowledgeable in two or more logistic disciplines. On 21 December 1981, Vice Chief of Staff, Army, approved the establishment of a working group to develop a program for this purpose. Membership includes TRADOC-LOGC, DARCOM, and CIVPERCEN. This working group has been tasked separately to assess the validity of the recommendation to establish an ILS civilian career field and to report its assessment to a HQDA Steering Committee 15 May 1982.
- b. We previously decided not to establish an additional SES position specifically charged with managing ILS civilian careerists. The DAS approved a Decision Memorandum on this issue 8 February 1982. However, we will consider assigning such a role to a current SES in ODCSLOG as an added duty.

- c. HQ DARCOM and HQ TRADOC were tasked to assess the validity of the recommendation to establish a separate ASI for military personnel and positions involved in ILS. Their replies are now being reviewed and will be provided to MILPERCEN and the Soldier Support Center for detailed analysis. A final assessment is scheduled for completion NLT 30 August 1982.
- 5. Relationship to Other Studies: HQDA is currently evaluating completely revised job standards developed by Office of Personnel Management (OPM) for the GS-346, Logistics Generalist series. The draft standards for GS-346 include ILS duties.
- 6. Relationship to Other Recommendations within the Study of Army Logistics 1981: Due to the nature of this recommendation, its impact is directly related to all other ILS recommendations contained in the study.
- 7. Coordination: OASA (IL&FM) and ODCSPER concur.

ADDED INFORMATION - Nov 82

Para 4.a. - Working Group recommended no separate career field. However, final decision has been deferred until the results on the basic project on Civilian Career Management for Logistics Management is completed at the end of CY 1982.

Para 4.c. - The final assessment has been delayed because of failure to resolve differences in opinion between DARCOM and TRADOC. Upon resolution of the conflicting views, the proposal will be forwarded to MILPERCEN and Soldier Support Center for detailed analysis. Date for resolution of views is 28 Feb 83.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 281

STUDY LOCATION (VOLUME-PAGE) 9-186

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

- a. Study of Army Logistics 1981, Section 9, page 9-186.
- b. AR 700-127.
- 2. Statement of Recommendation: "The name 'Integrated Logistics Support' remains unchanged."
- 3. Rationale for Recommendation: The study recognizes the broad context of the word "logistics" and states that a name change might slow the momentum that ILS is currently experiencing.
- 4. Analysis of Recommendation: Implementation of recommendation will continue.
- 5. Benefits of Implementation: Continued use of the term "ILS" in the Army will insure unity of terminology with OSD, the other Services, and with defense contractors.
- 6. Resources required for Implementation: None.
- 7. Method of Implementation: Perpetuate current Army terminology in appropriate regulations.
- 8. Relationship to other Studies: None.
- 9. Relationship to other Recommendations within the Study of Army Logistics 1981: This recommendation does not directly impinge upon other study recommendations. However, it does recognize the fact that ILS must remain a driving force in the materiel systems management process.
- 10. cordination: DARCOM, TRADOC, and ODCSOPS concur.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28J

STUDY LOCATION (VOLUME-PAGE): 9-188

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval to adopt subject recommendation as stated.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, page 9-188.
- (2) AMS Redesign Draft Directory-2nd Edition.
- (3) AR 700-127.
- b. Statement of Recommendation: DCSLOG confirm with COA that AMS redesign permits the identification and reporting of ILS-related costs by weapon system.
- c. Rationale for Recommendation: The study recognized a need for ILS offices to be able to verify estimates, monitor budgets, and develop actual cost experience for ILS functions (program and contract).
 - d. Analysis of Recommendation:
- (1) PM, Command, and HQ-ILS offices should be able to estimate ILS costs, justify ILS requirements and tract estimated-vs-actual ILS significant event/achievement costs.
- (2) Confirmation with COA indicates the AMS redesign draft directory does permit a structure identification of ILS-related costs by weapon system. AMS redesign is scheduled to be implemented in FY 87.
- (3) ILS cost elements (scope and cross-matrixing of varying work breakdown structure (WBS) levels/events) will be clearly defined and institutionalized as part of the Army Management Structure (AMS).

- (4) Draft revised AR 700-127, May 1982 edition, requires the establishment of an ILS management team and development of an ILS plan which identifies ILS-related life cycle funding by ILS element, major function, appropriation, and Program Objective Memorandum (POM) years.
- (5) ILSPs such as the Division Support Weapon System (DSWS) are being developed and refined by the ILS community in an effort to properly address the ILS cost aspects.
- (6) ODCSLOG has recently initiated collective action toward developing an urgent required capability to identify and review ILS costs as part of budget, SAR and ILS review process.
- (7) The Program Management Control System (PMCS) initiated within DARCOM will also serve to provide summary level of detail on ILS-related costs.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations Within the Study of Army Logistics 1981: None.
 - g. OCOA and OASA(IL&FM) concur with this memorandum.

3. Recommendation:

- a. Adopt the study recommendation as stated.
- b. DCSLOG in conjunction with COA will develop ILS funding definitions and guidance for AMS which will permit the identification and reporting through the newly developed DARCOM PMCS of ILS-related cost by weapon system.
- c. Continue to develop capability to review ILS costs as part of budget, SAR, and ILS review process.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28K

STUDY LOCATION (VOLUME-PAGE): 9-188

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

- a. Study of Army Logistics 1981, Section 9, page 9-188.
- b. AR 700-127.
- 2. Statement of Recommendation: "All ILS offices should reorient briefings and assessments:
 - o more quantitative impacts
 - o assess impacts in future of present problems
 - o develop 'Go-No-Go' support criteria
 - o recognize that ILS maturity will lag behind hardware maturity."
- 3. Rationale for Recommendation: The study recognizes the importance of providing the decision makers the information necessary to determine the health of the ILS program and to provide a basis for proper adjustment.
- 4. Analysis of Recommendation:
- a. The recommendation is being implemented through a number of actions which will serve to improve the depth and scope of ILS assessments and reviews.
- b. The USA Logistics Evaluation Agency (USALEA) has restructured their ILS-related issues. These assessments are provided to the ASARC membership and a summary of the ILS assessment is briefed to the ASARC by the ODCSLOG member. These assessments are structured to project supportability impacts and to characterize the inherent risks.
- c. DARCOM has restructured their ILS reviews into a command review format and a draft implementing regulation has been prepared and is currently being coordinated.

- d. TRADOC is establishing an ILS review program under the aegis of the USA Logistics Center. This combat developer review brings together the training, personnel, and logistics elements for a comprehensive review in order to identify and resolve ILS related problems.
- e. The format for the DA ILS Review has been changed in the revision to AR 700-127 which is currently being staffed. The new regulation will provide a tabular display of ILS considerations for review and will provide for full participation by appropriate ARSTAF and other participating agencies.
- f. New policy guidelines require establishment of "Go-No-Go" support criteria early in the acquisition program which are based upon agreed-to IOC support conditions. This recognizes that each program is unique and that decisions regarding supportability must be integrated into the overall program objectives.
- 5. Benefits of Implementation: Implementation of this recommendation insures that program risks involving system supportability gain high visibility and that decision makers are provided a firm basis for program redirection, if required.
- 6. Resources Required for Implementation: None required.
- 7. Method of Implementation: Re-publish AR 700-127 (Integrated Logistic Support) on an expedited basis and continue revised review and assessment practices.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM and TRADOC concur.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28L

STUDY LOCATION (VOLUME-PAGE): 9-190

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

a. Study of Army Logistics - 1981, Section 9, page 9-190.

- b. DARCOM Regulation 700-15 (Integrated Logistic Support).
- c. Decision Memorandum for DAS, subject: Assessment of Study of Army Logistics 1981, Recommendation 28P, Section 9, dated 21 January 1982.
- 2. Statement of Recommendation: A common core of ILS Functions be assigned to DARCOM's ILS offices:

0	Provisioning	0	ILS Planning by System	0	Review and Approval of Program and Requirements Doctrine
0	ILSMRS	0	Contract Reviews		
0	LSA Policy	0	Cost Reviews		

- o LSAR o Force Modernization
- 3. Rationale for Recommendation: The study recognized a need for management purview within DARCOM ILS offices over the sub-processes which impact upon or complement the ILS management process.

4. Analysis of Recommendation:

- a. DARCOM ILS offices generally have responsibility for the functions cited. A draft revision to DARCOM-R 700-15 (ILS), which is currently in staffing, specifically assigns all the above functions, except for force modernization, to the ILS Manager (ILSM) of a specific weapon system.
- b. The ILSM may be located within a PM office or within a central ILS office, depending upon the size of the PM office and organization of the applicable subordinate command. All subordinate commands are required to establish a central ILS Management Control Office. These offices establish local ILS policy and procedure, provide overall management of the ILS process, and provides or supports the ILSM for a specific acquisition program.

- c. DARCOM does not normally specify the organizational structure of subordinate commands and activities. The local commander is in the best position to determine the suitable organization for executing the assigned mission and responsibilities.
- d. Within HQ, DARCOM, ILS and Force Modernization are combined in a single office. This is also the trend in subordinate commands and activities.
- e. Reference 1c recommended non-adoption of recommendation which provided for ILS office "approval/disapproval" of program and requirements documents.
- 5. Benefits of Implementation: Provides for overall management over ILS-related functions in the materiel developer organization.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: As stated in paragraph 4.
- 8. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendation 28P, Section 9, is included as an element of this recommendation. Recommendation 28P has been previously addressed by reference 1c.
- 10. Coordination: DARCOM performed the assessment of this recommendation and concurs.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28M

STUDY LOCATION (VOLUME-PAGE): 9-192

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

- 1. Reference Study of Army Logistics 1981, Section 9, page 9-192.
- 2. Statement of Recommendation: "One DARCOM manager be established for the integration of LSAR, Provisioning (PMR), and TD/CMS data bases. In the near term, this manager will coordinate all redesign efforts for these systems; in the longer term, a fully integrated data base will be designed; and will coordinate all actions to shorten provisioning times and conduct a complete, systemic review of the process."
- 3. Rationale for Recommendation: The study recognized the relationships and the commonality of data residing in the three (3) data banks. Data must be interchanged and concurrently updated to insure data consistency.
- 4. Analysis of Recommendation:
- a. DARCOM currently has no plans to consolidate the LSAR, provisioning (PMR), and TD/CMS data bases under a single functional manager. However, all three data systems are currently under the same division at the DARCOM Automated Logistics Management Systems Activity for data system design, development, and maintenance. In addition, two actions are underway for improved integration of these data bases.
- b. A redesign of the PMR in the DARCOM Commodity Command Standard System is actively evaluating the consolidation of the LSAR parts file and the PMR into a single logistics file. This may also impact the National Stock Number Master Data Record, cataloguing, publication, and numerous other Commodity Command Standard System applications. This effort is scheduled to be completed during the 1st Quarter, FY 84.
- c. The second action is the redesign of the TD/CMS, which will address the TD/CMS-LSAR interface. Requirements documentation for the redesign is currently under development with design scheduled for initiation in July 1983.
- 5. Benefits of Implementation: The actions identified in paragraph 4 above will provide for mutually supporting and consistent data sources.

- 6. Resources Required for Implementation: Action underway within current resources.
- 7. Methods of Implementation: As stated in paragraph 4.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM provided the assessment of this recommendation and concurs.

TOPIC: INTEGRATED LOGISTICS SUPPORT

RECOMMENDATION NUMBER: 28N

STUDY LOCATION (VOLUME-PAGE) 9-192

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

- a. Study of Army Logistics 1981, Section 9, page 9-192.
- b. DARCOM-R 700-15.
- 2. Statement of Recommendation: "ILS offices will have staff responsibility for provisioning in DARCOM. These offices will additionally coordinate all actions to shorten provisioning times and report to the DARCOM manager. Functional staff continue their ILS roles."
- 3. Rationale for Recommendation: The study recognized a need for management purview within DARCOM ILS offices over the sub-processes which impact upon or complement the ILS management process.
- 4. Analysis of Recommendation:
- a. DARCOM ILS offices generally have management responsibility for provisioning.
- b. DARCOM HQ does not normally specify the organization structure of subordinate commands and activities. The local commander is in the best position to determine the suitable organization for executing the assigned mission and responsibilities.
- 5. Benefits of Implementation: Provides for overall management over ILS-related functions in the materiel developer organization.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: DARCOM has formulated a definitive action plan in response to the DEPSECDEF acquisition process improvement initiatives which will serve to streamline the provisioning process to the maximum extent possible.
- 8. Relationship to Other studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is contained within recommendation 28L.
- 10. Coordination: DARCOM performed the assessment of this recommendation and concurs.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 280

STUDY LOCATION (VOLUME-PAGE): 9-192

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

- 1. Reference Study of Army Logistics 1981, Section 9, page 9-192.
- 2. Statement of Recommendation: "The DARCOM Headquarters ILS office will develop guidance and techniques for:
 - o establishing incentives and penalties in ILS contracts
 - o estimating ILS-related contractual costs
 - o techniques to verify quality of contract deliverables."
- 3. Rationale for Recommendation: The study recognizes the importance of providing for and tracking contractor performance with regard to the ILS aspects of the total contractual effort.
- 4. Analysis of Recommendation:
- a. Contractual documents reflect a wide range of provisions and safeguards to insure quality ILS deliverables.
- b. Additional guidance is required to insure that contractual instruments reflect definitive requirements.
- c. ILS offices and the USA Materiel Readiness Support Activity provide quality surveillance of the ILS provisions within contracts.
- 5. Benefits of Implementation: Provides for better overall quality and completeness of ILS-related contractual provisions.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: DARCOM is developing an ILS Guide to contracting as a DARCOM pamphlet. The pamphlet, scheduled for publication in October 1982, will include guidelines and techniques for the above areas.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM performed the assessment of this recommendation and concurs.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28P

STUDY LOCATION (VOLUME-PAGE): 9-194

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation in full.

2. Discussion:

- a. Reference:
 - (1) Study of Army Logistics 1981, page 9-194.
 - (2) AR 700-127.
 - (3) DARCOM Reg 700-15.
 - (4) TRADOC ILS Management Handbook.
- b. Statement of Recommendation: "All requirement and program documents (MENS/LOA/ROC/O&O) will be routed through ILS offices. For approval/disapproval (not just 'for comment')."
- c. Rationale for Recommendation: The study recognized need for ILS offices to interact strongly in the systems acquisition process through the review of programmatic documents.
 - d. Analysis of Recommendation:
- (1) Requirement and program documents cited are routinely ro t i for appropriate staff review within DARCOM, TRADOC, and on the ARSTAF.
- (2) The recent emphasis at DARCOM on the Weapons System Maragement Team concept insures positive ILS interaction.
- (3) Reference 2a(4) provides a staffing scheme for acti β within TRADOC.
- (4) The "approval/disapproval" authority for ILS offices is not considered to be in consonance with accepted methods of staffing within the Army. The ultimate approval/disapproval authority must be retained at the appropriate management level with cognizant input/comment from all interested sources considered.

- e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. DARCOM and TRADOC concur.

3. Recommendation:

- a. Do not adopt the study recommendation insofar as the ILS office "approval/disapproval" authority is concerned.
- b. Continue current process of routing appropriate program documents through ILS office for review and comment.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28Q

STUDY LOCATION (VOLUME-PAGE): 9-194

PROPONENT OFFICE: HQDA ODCSLOG(DALO-SML)

- 1. Reference Study of Army Logistics 1981, Section9, page 9-194.
- 2. Statement of Recommendation: "By Milestone I, the 0&O concept (prepatred by TRADOC) will include:
 - o Long-range doctrine and support concepts (life cycle).
 - o Alternative support concepts.
 - o LSA "A" sheets.
 - o TMDE-ATE-BITE concepts.
 - o ILS as a part of the Integrated Battlefield.
- 3. Rationale for Recommendation: The Study recognizes the importance of the Combat Developer's role in ILS prior to Milestone I.
- 4. Analysis of Recommendation:
- a. The Combat Developer does play a major role in the ILS process prior to Milestone I.
- b. Draft DARCOM/TRADOC Memorandum of Understanding, dated 31 July 1981, concerning the Implementation of AR 700-127 on Integrated Logistic Support, 1 April 1981 edition, recognized this fact.
- c. Draft revised AR 700-127, May 1982 edition, identifies/clarifies the Combat Developer's role in the ILS process prior to Milestone I.
- 5. Benefits of Implementation: Provides ILS managers and decision makers the necessary ILS information for front end management in the acquisition process.

- 6. Resources Required for Implementation: TRADOC will identify resources currently authorized in their base program and total resources required to fully implement their pre-Milestone I "ILS program" in their Command Operation Budget submission.
- 7. Method of Implementation: Revised AR 700-127 on ILS scheduled for publication TRADOC/DARCOM handbook on Materiel Acquisition Process, both scheduled for publication in November 1982.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: TRADOC, DARCOM and OASA(IL&FM) concur with this memorandum.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28R

STUDY LOCATION (VOLUME-PAGE): 9-194

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

- a. Study of Army Logistics 1981, Section 9, page 9-194.
- b. AR 700-127 (Integrated Logistic Support).
- 2. Statement of Recommendation: "ILS office representation will be included on:
 - -- special task forces (STF) and special study groups (SSG)
 - -- contract negotiation teams
 - -- configuration control boards (voting member)
 - -- Source Selection Evaluation Board (SSEB)."
- 3. Rationale for Recommendation: The study recognizes the importance of support-related aspects of the total system acquisition effort.
- 4. Analysis of Recommendation:
- a. As a special task force and/or special study group is normally established between milestone 0 and I, under the chairmanship of HQDA, ODCSOPS, a requirement for separate DARCOM ILS office representation is not considered appropriate. The DARCOM representative performs duties as assigned in the group's charter.
- b. ILS offices generally serve as special advisors to contract negotiation teams. Due to the nature of contract negotiation, a single acquisition manager spokesperson is most appropriate.
- c. ILS offices generally participate in Configuration Control Board proceedings. Since a PM is responsible for all aspects of the assigned materiel acquisition, to include ILS, it would not be appropriate to require separate ILS office representation as a voting member, especially when the designated ILSM is in the PM office.
- d. ILS representation is currently included on source selection boards, either by the ILSM or the local ILS office.

- 5. Benefits of Implementation: Provides required level of interaction to properly influence the action from an ILS-interest perspective.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: As stated in paragraph 4.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: The inclusion of DARCOM ILS representation on STF/SSG was considered in the assessment of recommendation 28D which is the subject of a separate decision memorandum.
- 10. Coordination: DARCOM performed the assessment of this recommendation and concurs.

TOPIC: INTEGRATED LOGISTICS SUPPORT (ILS)

RECOMMENDATION NUMBER: 28S

STUDY LOCATION (VOLUME-PAGE): 9-194

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SML)

1. Reference:

- a. Study of Army Logistics 1981, Section 9, page 9-194.
- b. AR 700-127.
- e. AR 1000-1.
- d. TRADOC Reg 11-1.
- 2. Statement of Recommendation: "MALA and other quantitative LSA techniques be given high priority and applied to as many systems as practical."
- 3. Rationale for Recommendation: MALA* provides a valuable tool to assess the impact upon manpower and operating and support (0&S) costs when demonstrated system design characteristics (reliability, maintainability, etc.) do not meet program goals and objectives. The Study recognizes the need to readjust support requirements based upon a quantitative assessment of the system toward the end of the acquisition cycle.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. As a matter of policy, MALA will be a part of the cost and operational effectiveness analysis (COEA) for major developmental systems.
- b. MALA for the M1 Abrams Tank is nearing completion and a MALA is in progress for the Advanced Assault Helicopter (AAH). A MALA effort is planned for the Corps Support Weapons System (CSWS), the High Mobility Multi-purpose Wheeled Vehicle (HMMWV), and other major programs.
- c. MIL STD 1388 is currently being revised by OASD(MRA&L) to include a wide range of LSA to be conducted early in each acquisition program. The Army is expediting full implementation of the MIL STD 1388 requirements by issuing a comprehensive DARCOM LSA Handbook.

*MALA = manpower and logistics analysis.

- 5. Benefits of Implementation: Provides early quantitative influence upon system design and an impact assessment of the demonstrated system design characteristics on the support structure and upon selected elements of O&S costs.
- 6. Resources Required for Implementation: Being accomplished at required level with existing resources.
- 7. Method of Implementation: As stated above.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. DARCOM, TRADOC, and ODCSOPS concur.

TOPIC: PRE-AWARD SURVEYS/SHOULD COST STUDIES

RECOMMENDATION NUMBERS: 29, 29A

STUDY LOCATION (VOLUME-PAGE): 26-288, 13-122

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-A)

1. Reference:

- a. Study of Army Logistics 1981, Section 13 and Annex D; Section 26.
- b. Defense Acquisition Regulation (DAR) 1-337 (Should Cost) and 1-905.4 and Appendix K (Pre-Award Surveys).
- 2. Statement of Recommendations: Number 29, "Improve Pre-Award Surveys and Should Cost Studies" and Number 29A, "Pursue Expansion of Should Cost Studies."

3. Rationale for Recommendation:

- a. Improve Pre-Award surveys; although not stated, the implied rationale appears to be that improved Pre-Award Surveys would result in benefits in the form of programs/cost control.
- b. Improve Should Cost Studies/Pursue Expansion of Should Cost Studies, study states that \$851M was saved in a five-year period, 1976-1980, resulting from Should Cost Studies and that the potential savings from expanding the number of such studies could be significant.
- 4. Analysis of Recommendation: Implementation of these recommendations is ongoing and will continue.
- a. Policy guidance on both Pre-Award Surveys and Should Cost Studies is set forth in the DAR.
- b. The DAR is a DOD level regulation and is continually under review by a permanent committee, the Defense Acquisition Regulation Council, with representation from DOD, each of the services, and the Defense Logistics Agency.
- c. The contracting officer is responsible for determining whether a Pre-Award Survey or a Should Cost Study will be conducted on a particular proposed contract.
- d. Pre-Award Surveys are conducted by the Defense Contract Administration Services (DCAS) as and when requested by a contracting officer.

- e. Should Cost Studies are conducted by Army employees. As a result of the HQ DARCOM realignment, greater emphasis is being given Should Cost and the DARCOM implementing regulatory guidance and procedures are being revised to broaden its applications.
- 5. Benefits of Implementation: The benefits accruing from the ongoing and independently initiated actions covered by these recommendations are:
- a. Better, more timely information resulting from Pre-Award Surveys upon which to base a decision on whether a proposed contractor has the capacity and capability to perform.
- b. More reported savings, as the difference between the proposed contractor's proposal and the final, negotiated contract price, resulting from the expanded number of Should Cost Studies.
- 6. Resources required for Implementation: The recent realignment of DARCOM and better coordination with DCAS provide sufficient resources for continuation of these efforts.
- 7. Method of Implementation: The actions covered by these recommendations are ongoing.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM concurs.

TOPIC: ARRCOM COST CONTROL INITIATIVES

RECOMMENDATION NUMBER: 29B

STUDY LOCATION (VOLUME-PAGE): 13-122

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- 1. Reference Study of Army Logistics 1981, Section 13, pages 112-120.
- 2. Statement of Recommendation: "Export ARRCOM Initiatives to Other MSCs within DARCOM."
- 3. Rationale for Recommendation: ARRCOM has developed several initiatives to control overhead costs which may be applicable to other commands and commodities.
- 4. Analysis of Recommendation:
- a. ARRCOM has developed the following four initiatives to control contract overhead costs.
 - (1) The Uniform Cost Accounting Reporting System.
- (2) Categorizing the contractor's plant cost statement by appropriation.
 - (3) Personnel Utilization Report.
 - (4) Contractor Census Report.
- b. 411 four initiatives provide for trend analysis thereby allowing ARRCOM to take corrective action before overhead costs become out of control. The initiatives are good business practices and DARCOM has taken action to implement these four initiatives wherever possible.
- 5. Benefit of Recommendation: Reduces contractor's overhead costs providing Army with greater control through trend analysis.
- 6. Resources Required for Implementation: DARCOM is funding within available resources.
- 7. Method of Implementation: The four reporting systems are included as a part of the contract.
- 8. Relationship to Other Studies: None.

- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation supports number 29, "Improve Pre-Award Surveys and Should Cost Studies" by improving control of contractor's overhead costs.
- 10. Coordination: DARCOM (DRCPP-S) and OASA(RDA).

TOPIC: PROGRAM AND COST CONTROL SYSTEM (PCCS)

RECOMMENDATION NUMBER: 29C

STUDY LOCATION (VOLUME-PAGE): 26-288

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPP-B)

1. Reference:

a. DARCOM Circular 11-XX, DARCOM Program and Cost Control System, 16 June 1981.

- b. Decision Briefing for VCSA, 23 July 1981, subject: DARCOM Program and Cost Control System.
- c. General Vessey letter to General Guthrie, 29 July 1981, subject: DARCOM Program and Cost Control System.
- d. Chief of Staff Memorandum 81-11-29, Program and Cost Control System (PCCS), 25 November 1981.
- 2. Statement of Recommendation: Implement Program and Cost Control System (PCCS).
- 3. Rationale for Recommendation: The logistics study identifies program stability as an enhancement to the control of cost growth. PCCS as designed promotes program stability.
- 4. Analysis of Recommendation: Implementation of recommendation is continuing.
- a. Cost Discipline Advisory Committee findings on PCCS were provided to the Vice Chief of Staff of the Army. The VSCA requested CG DARCOM review PCCS, based on the Cost Discipline Advisory Committee's findings. Major finds include:
 - (1) Approval authority for changes is not spelled out clearly.
 - (2) Reprograming is relatively vague.
- (3) The requirement for revised documentation could be cumbersome and time consuming.
- b. Army Staff responsibilities for implementing PCCS are provided by reference d.

- c. ODCSRDA is responsible for Army Staff coordination of PCCS submissions.
- d. Initial programs selected for PCCS monitorship are Multiple Launch Rocket Systems (MLRS), Abrams Tank (M1), and Bradley Fighting Vehicle Systems (BFVS).
 - e. MLRS submission is expected at DA in January 1982.
- 5. Benefits of Implementation: PCCS is designed to promote program stability through the formalization of program change procedures. The system is designed to improve control over material acquisition program through actions that increase visibility of potential program changes and lead to early identification of decision alternatives.
- 6. Resources Required for Implementation:
- a. This recommendation is being fully implemented using available resources.
- b. There is no known shortfall of resources needed to support operations of PCCS.
- 7. Method of Implementation: Funds are provided through appropriations which support DARCOM and the Army Staff.
- 8. Relationship to Other Studies: Past analysis of the materiel acquisition system has identified the need for program stability and the control of cost growth.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study. However, the implementation of this recommendation is key to the success of other recommendations which concern management of the materiel acquisition process.
- 10. Coordination: ASA(RDA) and DARCOM concur.

FUNCTIONAL AREA: Training

TOPIC: IMPROVE PRODUCTION EXPERTISE

RECOMMENDATION NUMBERS: 30, 30A, 30B

STUDY LOCATION (VOLUME-PAGE): Annex D, 26-288, 6-114, 10-78 D-28

PROPONENT OFFICE: ODCSRDA (DAMA-PPM)

- 1. Reference Study of Army Logistics-1981, Section 6, pages 114, Section 10, page 78, and Annex D, page D-28.
- 2. Statement of Recommendation: "Develop Plan to Improve Production Expertise" with supporting recommendations.
 - a. "DA and DARCOM confirm actions to improve production expertise."
- b. "Reinstitute massive training effort to cure critical skills shortages in production base."
- 3. Rationale for Recommendation: Cost estimating and cost control in the materiel acquisition process are significantly influenced by the degree of production expertise within the Army.
- 4. Analysis of Recommendation:
- a. There is a close relationship between total program growth and estimating growth on large production contracts. This is attributed, in part, to unrealistic costs estimates and lack of production expertise.
- b. The Army Staff has taken the following actions to improve production expertise.
- (1) On 3 Mar 82, the ASA(RDA) appointed Mr. Little as the Deputy Assistant Secretary for Acquisition. Mr. Little is an ackowledged expert in production matters. Prior to his appointment, he served as Vice President for Production with Hercules, Inc.
- (2) ODCSRDA is developing increased production expertise within currently authorized strength figures. ODCSRDA has brought on active duty a USAR officer (0-4) with 17 years of production experience in private industry.

- (3) Reemphasizing Productibility Engineering and Planning (PEP) in the acquistion cycle. The concept leads to the fabrication of a few items to verify technical data packages prior to awarding the production contract. This step will help validate the conversion from research and development drawings to production drawings as well as validate the tooling. This concept was formerly part of Advanced Production Engineering.
- c. DARCOM has instituted a comprehensive plan to improve production expertise and improve availability of critical skills within the Army. To support this plan DARCOM is:
 - (1) Establishing a production division within its Headquarters.
- (2) Developing and staffing a draft DARCOM Regulation 70-X, Research, and Development Productibility Engineering and Planning (PEP).
- (3) Insuring Production Readiness Reviews are performed by Project Managers.
 - (4) Upgrading production engineering capabilities.
- (5) Considering conducting a study to determine procurement and production expertise.
- (6) Increasing liaison with DCAS in production arena to insure DCAS expertise is given full weight with regard to production matters.
- (7) Considering establishing a career field for production engineers.
- 5. Benefits of Implementation: Improved production expertise will result in better cost estimates, lower facilitization costs, and more economical modernization for surge and mobilization.
- 6. Resources Required for Implementation:
- a. The new production division at DARCOM is being funded from within existing resources.
- b. Remaining actions by ODCSRDA and DARCOM are being fully implemented within available resources.
- 7. Method of Implementation: Training programs are implemented through normal civilian and military career programs. Production division at HQ DARCOM has already been established.

- 8. Relationship to Other Studies: This recommendation is related to the Production and Industrial Preparedness Planning Conference After-Action Report, dated January 1982. Part of the report outlines DARCOM actions to improve production expertise.
- 9. Relationship to Other Recommendations within the Study of Army Logistics-1981: This recommendation is not paced or influenced by any other recommendation.
- 10. Coordination: HQ DARCOM (DRCPP-I, DRCMT), and OASA(RDA) concur.

TOPIC: NATIONAL INDUSTRIAL CAPABILITY

RECOMMENDATION NUMBERS: 31, 31A, 31B, 31D

STUDY LOCATION (VOLUME-PAGE): Annex D, 10-182, 10-240, 10-154, 10-263

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- 1. Reference Study of Army Logistics 1981, Section 10, pages 154, 155, 182, 183, 240, 241, 262.
- 2. Statement of Recommendation: "Correct Serious Decline in National Industrial Capability" with supporting recommendations.
 - a. 31A: "Stockpile Selected Major Assemblies."
 - 5. 31B: "Cure Long Lead Time Thru Industrial Options."
 - c. 31D: "Institute Production Base Cures."
- 3. Rationale for Recommendation: Defense industrial base has deteriorated resulting in longer leadtimes for weapon systems, increased costs, and lack of surge capability for a national emergency.
- 4. Analysis of the Recommendation:
- a. The recommendations are correct in that they point toward an objective of turning around this country's decline in industrial capability. All of the above recommendations are currently being evaluated for implementation by a Secretariat level steering committee which is charged with implementing the DOD Action Plan for the Improvement of Industrial Preparedness.
 - b. The plan is structured around three key elements:
- (1) National Resource Base Overcoming near-term material shortages and leadtime problems.
 - (a) By improving our self sufficiency for critical raw materials.
 - (b) By obtaining sufficient skilled labor.
 - (c) By improving productivity.
- (2) Defense Acquisition Process Improving stability of Army procurements.
- (a) By creating an attractive environment for the defense contractors.
 - (b) By improving equipment producibility.

- (3) Industrial Preparedness Program Consistent Defense Guidance and Funding.
- (a) By creating an organizational and legislative environment conducive to industrial preparedness planning and mobilization.
 - (b) By maintaining a responsive industrial base.
- d. The DOD Action Plan provides a common framework for all three Services and DLA to correct the serious decline of our industrial capability. The four recommendations will continue to receive high level attention by the Secretariat level steering committee as a part of the DOD Action Plan.
- 5. Benefit of Implementation: Ultimately, provides industrial base capable of sustaining combat forces during mobilization.
- 6. Resources Required for Implementation: Recommendation can be fully implemented within available resources. During FY 83, \$876 million is programed for industrial preparedness.
- 7. Method of Implementation: Recommendations will be implemented as a part of the DOD Action Plan.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation. However, recommendations 49 and 72 are related in that they all support improving the capability of the industrial base.
- 10. Coordination: HQ DARCOM (DRCPP-I), OASA(RDA), OASA(IL&) concur.

TOPIC: QUANTIFY SURGE/MOB/WARTIME GROSS WORKLOAD ON DARCOM

RECOMMENDATION NUMBER: 31C

STUDY LOCATION (VOLUME-PAGE): 10-242

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- 1. Reference Study of Army Logistics 1981, Section 10, pages 242-262.
- 2. Statement of Recommendation: "Develop and validate a methodology to quantify the surge/mobilization/wartime gross workload on the DARCOM wholesale system."
- 3. Rationale for Recommendation: A model is needed which will be capable of relating workload requirements to people requirements as a function of time (buildup), and which will indicate where queues will form in the flow of requisitions and materiel.
- 4. Analysis of the Recommendation: Analysis has been ongoing since March 1980. This is a DARCOM initiated project and it is nearing fruition. Coordination with DARCOM indicates the methodology will be completed and verified by June 1982, possibly sooner. The resultant simulation model is called Surge/Mobilization/Wartime Index of Operational Employment MOB WAR IOE. It will quantify DARCOM wholesale base resource requirements by time increments under surge/mobilization/wartime conditions. The model applies primarily to the functional processing of key workloads within DARCOM Materiel Readiness Commands and DARCOM Depot System Command depots. The technique of this model involves relating the behavior of the number of fielded systems and their frequency of use to mission requirements of the wholesale logistics base.
- 5. Benefits of Recommendation: Once such a model is developed, it will provide a macro planning tool which will help to cure long lead time now required in gearing up the production base for war. It will do so by helping to identify where priorities for scarce resources need to be replaced.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: DARCOM will install validated methodology program in appropriate computers and conduct training to insure the methodology is understood and properly utilized.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM, ODCSOPS, and ASA(IL&FM) concur.

TOPIC: ENERGY CONSERVATION

RECOMMENDATION NUMBERS: 32, 32A-32C

STUDY LOCATION (VOLUME-PAGE): 12-82, 12-84

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

1. Reference:

- a. Study of Army Logistics 1981, Section 12.
- b. Army Energy Plan updated 9 Dec 81.
- c. Army Facilities Energy Plan, 26 Oct 81.

2. Statement of Recommendations:

- a. That the Army invest in the Energy Conservation Program.
- b. Supporting Recommendation ${\tt A}$ that the Army convert selective large oil fired plants to other fuels.
- c. Supporting Recommendation ${\tt B}$ that the Army exploit site available energy resources.
- d. Supporting Recommendation C that the Army continue energy conservation policies for facilities.
- 3. Rationale for Recommendation: Section 12 of the study addresses the Army energy situation. After reviewing the most promising avenues and alternatives, the study makes recommendations which can maintain force readiness in an unstable energy environment.
- 4. Analysis of the Recommendation: The study shows US petroleum dwindling and scarce fuels escalating in price. The conclusion is to commit funds for energy conservation programs. The supporting recommendations focus on facilities energy consumption in FY 81 since 83 percent of the Army's energy was consumed in facilities.

5. Benefits of Recommendation:

- a. Implementation of the recommendations will reduce the amount of OMA funds used to purchase energy. The funds saved will be available for other high priority requirements. The result will be increased force readiness.
- b. Implementation of the recommendations will assist in meeting the Army energy goals.

6. Resources Required for Implementation: Funds are programed for each of the recommendations in the FY 83-87 POM. Continued support will be required in future years to fully implement the recommendations.

7. Method of Implementation:

- a. To invest in the energy conservation program a number of specific programs have been developed. The programs are listed in the Army Energy Plan and Army Facilities Energy Plan. POMs and budgets are developed based on these programs. Several of the programs are addressed in the supporting recommendations.
- b. Supporting Recommendation A this recommendation is being implemented with the Fuel Conversion Program. This program converts selected facilities from burning oil or natural gas to solid fuel. The first project was in FY 81. There are two projects in FY 82. The next project is in FY 84.
- c. Supporting Recommendation B this recommendation is being implemented with the Energy Conservation Investment Program (ECIP) and procedures to review new construction projects. The ECIP consists of economical retrofit construction projects designed to reduce energy consumption. During the selection process of ECIP projects, site available energy resources are analyzed in detail. All new construction projects are also subject to a thorough review to maximize use of site available and economical energy resources.
- d. Supporting Recommendaton C this recommendation is being implemented with an active Army-wide energy awareness program and specific funding programs. The Army Energy Awareness Program includes energy awareness installation seminars, publications to organize and conduct an effective installation energy awareness program, an annual Energy Awareness Week, and frequent publication of energy consumption results. Funding programs are listed in detail in the Army Facilities Energy Plan.
- 8. Relationship to Other Studies: Past analysis has recognized the need for each of the recommendations. The results of these analyses are described in the Army Energy Plan and the Army Facilities Energy Plan.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendation number 34--design energy efficiency into weapon systems--will impact on the overall recommendation. During FY 81, the Army consumed 17 percent of the overall energy consumption for mobility fuels. Implementation of this recommendation, along with other programs to improve vehicle efficiency, will result in more efficient use of mobility fuels.
- 10. Coordination: OCE and ODCSRDA concur.

ADDED INFORMATION - Nov 82

Para 7.b. - Solid fuel conversion project scheduled for FY 84 has been changed to FY 85.

TOPIC: LONG RANGE PLANNING, R&D

RECOMMENDATION NUMBERS: 33, 33A

STUDY LOCATION (VOLUME-PAGE): 2-556, 2-557

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPT)

1. Reference:

- a. DARCOM Long Range RDA Plan.
- b. Study of Army Logistics 1981, pages 2-556/7.
- 2. Statement of Recommendation:
 - a. "Improve Long Range Logistics Planning in R&D." (33)
- b. "The Long Range RDA Plan be expanded to include logistics assessments of emerging technologies." (33A)

NOTE: The above recommendations have been combined herein as one recommendation since they are mutually inclusive.

- 3. Rationale for Recommendation: The study makes the following observations leading to the recommendations above:
- a. The application of new technologies is a major factor in future logistics planning.
- b. The growing emphasis on electronics in general and electronic test equipment in particular has a major impact on logistic burdens.
- c. The trend in training maintenance personnel has been to teach function but not theory.
- d. There is an increasing requirement for software support as a part of the logistics effort.
- e. Increased survivability of systems employing new technologies shifts the burden from the production base to supply and maintenance.
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. DARCOM has developed a Long Range RDA Planning methodology that examines emerging technologies, matches them against future requirements, estimates resource requirements, and prioritizes the entire tech base in line with total Army needs.

- b. The first iteration of the plan has been published and a second iteration product will be completed by early summer.
- c. This plan is being developed under the direction of the Laboratory Management Office of HQ, DARCOM. DARCOM has established a sizable planning office within the Office of the Director of Program Analysis and Evaluation which has been tasked to pull together all planning efforts within the command. One of their objectives is to implement the findings of the Study of Army Logistics 1981 effort, and in particular to look at the impact of technology on the logistics load.
- d. DARCOM is currently developing a plan of implementation for their coordinated long range planning effort. The concept will be briefed to General Keith in April with the full plan to be developed and reported back by November 1982.
- 5. Benefits of Implementation: Incorporation of logistics considerations early in the development cycle when the technology is being initially evaluated will yield a better system development decision.
- 6. Resources Required for Implementation:
- a. The Laboratory Management Directorate with HQ, DARCOM, is currently authorized ten personnel to execute the planning function.
- b. This recommendation can be fully implemented using currently authorized assets.
- 7. Method of Implementation: The Laboratory Management Office within HQ, DARCOM, has already established a planning office that is adequately staffed and plans to implement this function.
- 8. Relationship to Other Studies: The University of Missouri, Office of Science and Technology, has proposed a study that is to be funded by USDRE to examine the impact of technology on the logistics system. This multidiscipline study will include some Army systems in its initial trial. There should be some spin-off from this study that can be used in the DARCOM LRRDAP.

TOPIC: ENERGY EFFICIENCY

RECOMMENDATION NUMBER: 34

STUDY LOCATI : TOLUME-PAGE): 12-82

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-ARZ-C)

1. Reference:

- a. Study of Army Logistics 1981, Section 20.
- b. Army Energy Plan updated 9 December 1981.
- c. Army Mobility Energy R&D Plan appdated 31 March 1981.
- d. AR 1000-1, Basic Policies for Systems Acquisition, 1 May 1981.
- 2. Statement of Recommendation: "Design energy efficiency into mobile weapon systems."
- 3. Rationale for Recommendation: A stated objective in the Army's Energy Plan is to meet long-range mobility operations goals in reduction of both energy consumption and dependence on petroleum fuels. Improvement of operational efficiencies for internal combustion engines and development of novel engine cycles and geometry are areas, inter alia, planned for reduction of energy consumption in field operations.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. Unlimited availability of petroleum fuels can no longer be taken for granted. Costs of mobility fuels have escalated to being a major item of operational expense, and supplies have been shown to be finite. Yet most of the major mobile weapon systems now fielded or coming into the inventory in the mid-eighties are heavy consumers of mobility fuels. For purposes of supportability and to insure the Army can execute the Airland Battle 2000 Concept, future mobile weapon systems must be made more energy efficient.
- b. Paragraph 2-14d of AR 1000-1 specifically states under the heading of design consideration that efficient use of energy will be a primary objective of energy-dependent acquisition programs. Energy conservation will be an agenda item, when appropriate, at the Milestone Decision Review. It must be identified in qualitative and quantitative terms in requirements documents and considered and documented in the preparation of cost estimates and funding requirements. Under its Army General Staff responsibilities, the Deputy Chief

- of Staff for Research, Development, and Acquisition manages the acquisition of Army material from exploratory development through procurement and is the proponent for implementation of the provisions of AR 1000-1. AR 1000.1 implements DODD 5000.2, Major System Acquisition Program.
- c. Current research and development effort related to mobility system fuel efficiency includes projects for energy efficient engines, drive trains and transmissions, testing of alternative fuels and synthetic fuels and lubricants, and simulator development. The FY 83 RDT&E program amounts to approximately \$44 million.

5. Benefits of Implementation:

- a. Requiring that energy conservation be included in design considerations will produce a future Army family of mobility weapon systems which will be significantly more supportable and affordable.
- b. Research and development for improved fuel economy power trains could produce near term system power components, e.g., engines, suitable for retrofit into existing equipment.
- c. The end result of implementation will be reduction of Army mobility energy consumption.
- 6. Resources Required for Implementation:
- a. This recommendation is being implemented using available resources and current materiel acquisition processes.
- b. RDT&E funding is required to be maintained at a sufficient level to continue established mobility energy programs.
- 7. Method of Implementation: Instruction to design energy efficiency into mobile weapons systems is already written into materiel acquisition policy regulation. Revision of regulation (AR 1000-1) this summer will strengthen the language. Funds for research and development of improved fuel economy equipment and materiel are provided through RDT&E appropriation.
- 8. Relationship to Other Studies: There is extensive literature, both by government and by private agencies, indicating the necessity for developing more fuel efficient systems. The realities of declining national resources and increasing cost of petroleum based fuels dictate that this recommendation be continually implemented.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation bears a direct relationship with recommendation 32, Invest in Energy Conservation Programs. Maintaining funding for RDT&E mobility energy programs is an essential and necessary part of this recommendation. A strong in-house R&D program serves to make the Army a smart buyer and knowledgeable specification writer for design considerations, let alone permits the capability for technological breakthrough.
- 10. Coordination: ODCSLOG, ODCSOPS, DARCOM, and the ALA Functional Area point of contact for energy matters concur.

TOPIC: ADPE MANAGEMENT

RECOMMENDATION NUMBER: 35

STUDY LOCATION (VOLUME-PAGE) D-22

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-C4T)

- 1. Reference Study of Army Logistics 1981, Section 24 and Annex D.
- 2. Statement of Recommendation: "Enhance Wholesale ADP Blueprint; Correct Deficiencies in Retail ADP."
- 3. Rationale for Recommendation: The study states that DARCOM has developed a blueprint for wholesale ADP needs throughout the 80's that, while adequate in concept, is not supported in sufficient quantities in terms of resourcing under the DARCOM 5-year ADPE budget line. In addition, the study cites deficiencies in the retail ADP area in terms of funding shortfalls in Combat Service Support (CSS) ADPE modernization, fragmented management and control of CSS logistics systems in both development and maintenance, and CSS data management.
- 4. Analysis of Recommendations: Consideration of these recommendations is ongoing outside of the envelope of the Study of Army Logistics 1981, and will continue.
- a. The DARCOM ADP Blueprint sets forth a concept for evolutionary development for information processing in the wholesale arena throughout the 1980's. The initial concept was advanced by the DARCOM Commander (General Guthrie) in November 1978. That initial concept requires rejustification in light of ongoing actions and current capabilities of ADPE. As an example, a major sub-element of the DARCOM ADP Blueprint for the 80's was the distributive processing thrust that envisioned the distribution of ADP processing and the use of large numbers of ADPE by the eight (8) functional areas at DARCOM Major Subordinate Commands. As a result of DA questioning the need for more ADPE for this purpose, DARCOM subsequently agreed that these applications could be processed on currently installed ADPE. Accordingly, the DARCOM ADP Blueprint should be updated and needed enhancements be justified in accordance with AR 18-1 and associated technical bulletins. This will assure that ADP enhancements will be economically justified.
- b. Funding shortfalls for DAS 3 CSS ADPE have been addressed through the FY 84-88 POM process, and will be accommodated as appropriate within overall Army priorities and budget constraints.

- c. The other recommendations in the retail ADP area, which call for the consolidation of all standard Army automation responsibilities in a new commodity command under DARCOM, are being addressed in a separate study by DARCOM which is ongoing at this time.
- 5. Resources Required for Implementation: Unknown at this time.
- 6. Method of Implementation: The various aspects of the wholesale ADP portion of the recommendations will be processed for review, approval, and implementation under the policies and procedures in AR 18-1, Army Automation Management. The CSS ADPE deficiency correction will be attempted within fiscal constraints by the PM TACMIS.
- 7. DAMA-CSC, USACSC (PM TACMIS), DALO-PLS concur.

TOPIC: POST DEPLOYMENT SOFTWARE SUPPORT

RECOMMENDATION NUMBER: 36

STUDY LOCATION (VOLUME-PAGE) 24-194 THRU 24-242

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-C4P)

1. Reference:

- a. Study of Army Logistics 1981, Section 24, pages 194-242.
- b. HQDA, Post Deployment Software Support (PDSS) Concept Plan for Battlefield Automated Systems, May 1980, Interim Approval 5 May 1981.
- c. Minutes, DAMO-RQC, Army Command and Control (AC2) Steering Committee Meeting, 31 March 1981.
- d. Letter, ATCD-AUD, Contractual Support for the In-Theater Army Post Deployment Software Support (PDSS) Study, 15 December 1981.
- 2. Statement of Recommendation: "Define Post Deployment Software Support (PDSS) Field Support to computer system user."
- 3. Rationale for Recommendation: The study addresses the need for PDSS of battlefield and non-battlefield automated systems. The study goes on to state that the resourcing for non-battlefield automated systems is well identified and accomplished (96 percent). On the other hand, only 60 percent of the PDSS resourcing for battlefield automated systems have been addressed. One reason for this resource shortfall lies in the fact that PDSS field support requires better definition.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The AC2 Steering Committee tasked ODCSLOG to study PDSS field support in March 1981. That sponsorship passed to DAMO-C4 based on the fact that PDSS is software oriented and not hardware related.
- b. TRADOC Logistics Center has developed the Statement of Work for a contractual study effort which will be let in March 1982 and completed by September 1983.
- c. The study will produce the PDSS system which will be instituted for implementation in the field. In this way, the resourcing for such support will be properly costed and supported within the PPBS cycle.

- 5. Benefits of Implementation: The results of the study will provide the "definition" of PDSS field support and, in so doing, it will facilitate resourcing by the appropriate agencies in the PPBS cycle.
- 6. Resources Required for Implementation: The FY 82 Amendment to the Budget includes PDSS funding for HQ TRADOC of which \$300K are earmarked to support the study effort.
- 7. Method of Implementation: The Statement of Work will be forwarded to the Office of the Assistant Secretary of the Army for Installations, Logistics and Financial Management for final approval. The funding is available in the FY 82 Amendment to the Budget.
- 8. Relationship to Other Studies: This study will be a unique effort, the results of which will be incorporated into the HQDA, PDSS Concept Plan (ref 1b).
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: The results of this recommendation will be used to identify the resource requirements for PDSS Field Support. Those requirements will then be added to the resource requirements to be planned for in Supporting Recommendation C, of Category I Recommendation #4; Plan to Resource Requirements for Post-Deployment Software.
- 10. Coordination: ODCSLOG, TRADOC, and DARCOM concur.

TOPIC: INITIAL PROVISIONING

RECOMMENDATION NUMBER: 37

STUDY LOCATION (VOLUME-PAGE): 9-57 to 9-75

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- 1. Reference Study of Army Logistics 1981, Section 9, pages 57-75.
- 2. Statement of Recommendation: "Shorten initial provisioning."
- 3. Rationale for Recommendation: The study states that because of the time required to initially provision, supplies are not available at Initial Operational Capability (IOC).
- 4. Analysis of Recommendation: While the study recommendation states "Shorten Initial Provisioning," initiatives are aimed at increasing the accuracy, streamlining, and improving the initial provisioning process. While provisioning time may be shortened, the real benefit to be gained is enhanced planning and improved accuracy in forecasting requirements, and thus better accommodation of procurement leadtimes. The end goal is responsive support of equipment at the time it is fielded.
- a. ODCSLOG completed major revision of AR 700-18, Provisioning of US Army Equipment, September 1981. A new addition allowed for the procurement of data necessary for use in the computer processing of data requirements.
- b. Initial Materiel Support Officer (IMSO). ODCSLOG has established this position to implement DOD provisioning policy and coordinate all Army provisioning functions.
- c. DARCOM has primary responsibility for planning and applying an Integrated Logistic Support (ILS) plan for assigned materiel acquisition programs to insure successful accomplishment of total provisioning.
- d. DARCOM PAM 700-18, Provisioning Techniques, February 1981. This document provides standardized procedures for use by all Materiel Readiness Commands (MRCs) and is used as a training vehicle for new personnel assigned to provisioning functions.
- e. Cataloging Processing System (CPS). CPS was implemented in May 1981. Prior to its development, most cataloging was a manual process. It provides for the automatic computer screening of Provisioning Parts List (PPL) against local command files for matching a stock number (NSN) to the items. Those parts that do not match are automatically bounced to Defense Logistic Services Center (DLSC) Master File for matching to a NSN. If matched, the item is recorded as an Army interest item and included in the Army Master Data File (AMDF), and if the item is not matched, a request for NSN assignment is issued.

- f. Provisioning Technical Work Group. Chartered by DARCOM 7 December 1978, this body reviews and assesses current mathematical computation models used to determine requirements during initial provisioning. The primary objective is to improve accuracy and streamline requirements determination. During spring of 1982 DARCOM updated the scope to include the computation of war reserve requirements.
- g. Revision of MIL-STD 1552/1561. In January 1982, DARCOM revision to these military standards resulted in standardized data requirements to be used by all MRCs and other military services during provisioning.
- 5. Benefits of Implementation: Streamlining, improving, and standardizing the initial provisioning process and insuring that minimum initial stocks and associated technical documentation are available at the using organizations, maintenance and supply activities without degradation of equipment system.
- 6. Resources Required for Implementation: This recommendation is being implemented using available resources.
- 7. Method of Implementation: DARCOM has several ongoing actions to improve and streamline initial provisioning.
- a. Provisioning Master Record Redesign (PMR). The purpose of redesigning the Commodity Command Standard System's (CCSS) PMR is to provide an automated data system which will function in a responsive manner and support provisioning functions. This system will reduce provisioning run time, and eliminate duplication and system redundancy.
- b. Provisioning Methodology Assessment. This effort will determine the adequacy of initial provisioning and develop recommended improvements with regard to: increasing the accuracy of budget predictions for procurement funded secondary items; assessing the results of implementing DOD/DA policy by DARCOM's Initial Provisioning Requirements Determination Bare Bones Standard Initial Provisioning (BBSIP), Standard Initial Provisioning (SIP), and Essential Repair Parts Stockage List (ERPSL) Model, and developing recommended changes to improve initial provisioning.
- c. Development of DARCOM Supplement to AR 700-18 quipment. The purpose of developing this supplement is to standardize the implementation of policy, clarify policy statements, eliminate, as much as possible, non-policy content, develop contact points within the MRCs for distribution of an implementation of provisioning policy, and to develop a better understanding of the problems involved in implementation of revised/new provisioning policy.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within Study of Army Logistics 1981: None.
- 10. Coordination: OASA(IL&FM), ODCSOPS, ODCSRDA, ODCSPER, DACS, COA, NGB, OCAR, DARCOM, TRADOC, and FORSCOM concur.

TOPIC: FACILITIES

RECOMMENDATION NUMBER: 38

STUDY LOCATION (VOLUME-PAGE): D-30

PROPONENT OFFICE: HQDA OCE (DAEN-ZC)

1. Reference:

- a. Study of Army Logistics 1981, Section 11.
- b. Construction Engineer Research Laboratory Study, subject: MCA Cycle Study, September 1981.
- 2. Statement of Recommendation: That DA, OACE, coordinate the MCA cycle with the associated new systems development.
- 3. Rationale for Recommendations: The study indicates that for the most part, the MCA/Materiel Acquisition Cycles could be synchronized to insure timely availability of facilities to support new systems. This would eliminate turbulence in introducing new systems into the Army.
- 4. Analysis of Recommendation: In principle, implementation of the recommendation is ongoing and will continue.
- a. OCE has completed a review of regulations and other documents which should address coordination of facilities planning for modernization systems. Appropriate facilities planning entries are now in AR 700-127, Integrated Logistics Support, 1 April 1981; AR 15-14, System Acquisition Review Council Procedures, 1 May 1981, and AR 11-18, The Cost Analysis Program, 10 October 1975.
- b. To insure that facilities considerations are linked to the appropriate system as soon as possible in the Materiel Acquisition process, OCE has started publishing Facility Support Plans (FSP) which serve as an adjunct to the AMIM by further assisting facility planners in determining facility requirements resulting from force modernization initiatives. Eighteen (18) FSPs have been completed, eight (8) are under development. OCE is, in coordination with the ARSTAF, developing an order of priority for preparing an additional seventy (70) FSPs. The intent is to have FSP data available to facilities planners at installations through remote terminal access to central memory unit at HQDA.
- c. OCE, through the OACE and with the aid of the Directed Stationing System and the Project Tracking System, will have an improved capability to assess MACOM Force Modernization submissions.

- d. A close working relationship has been established with DCSLOG and Logistics Evaluation Agency (LEA) to insure effective facilities assessments as an integral part of ILS.
- e. Dynamics in the systems' fielding schedules will continue to occur and create turbulence in the programing and execution of facilities. In those situations, the timely construction of facilities to support system fielding can only be accomplished through the following intensive management action in the MCA program:
- (1) Early identification of system facilities requirements, and transmission to installation engineers via Facilities Support Plans.
 - (2) Early design of known, well-defined requirements.
- (3) Timely analysis of proposed changes in fielding plans to insure facilities impacts are identified and considered prior to finalizing fielding plans.
- (4) Crisis execution and innovative management of requirements generated by changes to fielding plans which cannot be handled by the routine MCA cycle.
- 5. Benefits of Implementation: This procedure insures the optimum potential for timely construction of facilities and fielding of new systems.
- 6. Resources Required for Implementation:
- a. The Corps of Engineers has provided adequate personnel assets in the Assistant Chief of Engineers Office (DAEN-ZC), Directorate of Military Programs (DAEN-MPE), and Huntsville Engineer Division to identify, analyze, plan, program, and monitor facilities requirements for new systems.
- b. There is currently no shortfall of resources needed to support operations of this functional element.
- 7. Method of Implementation: The requirements for this effort have been provided with Corps of Engineer assets.
- 8. Relationship to Other Studies. Past analysis recognized the need for this requirement and established the current procedures. The requirement is periodically validated through manpower surveys and budget reviews.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: OCSA, ODCSLOG, ODCSOPS, and AFMCO concur. OTIG has noted.

TOPIC: MAINTENANCE AND CONSTRUCTION ARMY (MCA)

RECOMMENDATION NUMBERS: 38A, 38B

STUDY LOCATION (VOLUME-PAGE): 11-106

PROPONENT OFFICE: HQDA OCE (DAEN-ZCP-P)

1. References:

a. Army Logistical Study, 1981, Section II, Facilities to Support the Army, page 106.

b. MCA Cycle Study, Construction Engineering Research Laboratory.

2. Statement of Recommendation:

- a. "Review programming and construction procedures to integrate facilities requirements early in the process.
- b. Review alternative approaches to shortening long lead times throughout the MCA process.
 - * In the progamming process.
 - # In the construction process."

3. Rationale for Recommendation:

- a. As the study explains, the Army is facing serious problems in the replacement and upgrade of facilities to meet new equipment and force structure needs as well as renewal and modernization. This problem is manifest in the Army's need to identify the type of facilities needed early in the development process for new systems and force structures, balance these against facilities requiring replacement through obsolence and deterioration and contain the growing backlog of construction.
- b. The stated recommendations are designed to meet these needs more rapidly through identifying requirements earlier, more logically programming the facilities and speeding up construction.

- 4. Analysis of Recommendation:
- a. Implementation of these recommendations is being continually evaluated.
- b. Coordination and direction for these recommendations are assigned to the Programming Division, Office of the Chief of Engineers (DAEN-ZCP).
- 5. Benefits of Implementation:
- a. These two recommendations, if implementable, are expected to affect a more rapid identification of the Army's requirement for new facilities and/or upgrade of current facilities, provide the data to support funding needs, and provide a usable facility earlier.
- 6. Resources required: No additional resources have been identified as of this date. Resources will have to be programmed to satisfy the facilities requirements.
- 7. Implementation: Implementation of these recommendations will come at many levels and will be a gradual process. At present a study (Reference 1b) is being reviewed by the responsible managers in Headquarters USACE and is under review by GAO. This study will assist in identifying areas where economy of time exsts if AR's, normal practice or congressional requirements could be changed or modified.
- 8. Relationship to Other Studies: As mentioned in paragraph 4, a study was conducted to address these recommendations. Further study efforts are intended to address implementation. The study suggested the following:
- a. Placing small, medium and large projects on separate tracks in accordance with their size.
- b. Relieving execution constraints so as to speed up the process particularly the execution of smaller projects.
- c. Placing execution responsibility under one management organization and contracted management activities where appropriate.
- d. Greater use of standard designs and maximization of the currently underutilized potential of automated data processing resources.
 - e. Synchronizing MCA with the weapons development process.
- 9. Relationship with Other Recommendations: These recommendations are not related to, nor placed by any other recommendations in the study.
- 10. OASA (IL&FM) concurs.

TOPIC: FACILITIES

RECOMMENDATION NUMBER: 38C

STUDY LOCATION (VOLUME-PAGE): 11-106

PROPONENT OFFICE: HQDA OCE (DAEN-ZCP)

- a. Study of Army Logistics 1981, Section 11, pages 102 106.
- b. AR 5-4, Chapter 5, Productivity Capital Investment Programs (under revision).
- c. Section IV, Subsection C, Volume II, 1 October 1981, and Section III, Subsection D-1, Volume III, 17 December 1981, Army Guidance.
- 2. Statement of Recommendation: DA should support funding of facilities based upon specified paybacks and increased logistics readiness.
- 3. Rationale for Recommendation: The study showed that logistics facilities considerations in FORSCOM, TRADOC, USAREUR, and EUSA, by and large, have been subsumed under priorities that emphasize the soldier and introduction of new systems into the force.
- 4. Analysis of Recommendation: The implementation of the recommendation is in progress to the maximum extent possible under the OSD Productivity Investment Funding (OSD PIF) Program, where OSD sets aside over \$100M annually for high pay-off projects exceeding \$100,000.
- a. For the most part, construction priorities are determined by the MACOMs based upon DOD/DA policies and objectives. The above MACOMs are soldier intensive and will normally emphasize the soldier and the fielding of new systems in their construction priorities.
- b. The priority of construction projects at the DA level is a little more complicated. Each DA initiative will require development of a Program Development Increment Package (PDIP). The PDIP will identify all the resources required to implement each initiative or new mission. DA will prioritize these initiatives and, as determined by the Army leadership, allocate resources required to implement the initiatives in the required timeframe. The Army's prioritization system isn't perfect, but it does avoid the study's concern that construction associated with new systems and the soldier's quality of life are automatically given the higher priority but rather these new requirements are, through a rational process, given resources commensurate with their overall importance to the Army.

- c. The logistics facilities projects with high paybacks are identified early in the MCA program development process and selected by the DA Construction Requirements Review Committee for either regular MCA or for competition under the OSD Productivity Investment Program.
- d. The Productivity Capital Investment Programs, reference 1b, support funding of facilities based upon specified paybacks. These programs are designed to reduce operating costs through timely investments for capital tools, equipment, and facilities. The concept is to dedicate a portion of the budget toward productivity initiatives that recover savings frequently lost due to delays in the budget process or because of competition from higher priority mission requirements. These programs provide the recommended support, to the maximum extent possible, for logistics facilities identified in the subject study.
- 5. Benefits of Implementation: Logistics readiness construction programs can be prioritized and compete for funding based upon specific payback criteria.
- 6. Resources Required for Implementation: This recommendation is being implemented using available resources.
- 7. Method of Implementation: OCE, in conjunction with COA, has issued special processing instructions for submission of construction projects under the OSD PIF in the Army Guidance, reference 1C.
- 8. Relationship to Other Studies: Unknown.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: PAED and OCA concur.

TOPIC: DCAS SUPPORT TO ARMY CONTRACTS

RECOMMENDATION NUMBERS: 39, 39A, 39B

STUDY LOCATION (VOLUME-PAGE): 27-76

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-A)

- a. Study of Army Logistics 1981, Section 27 pages 56-77
- b. Charter, Joint Contract Administration Coordinating Council, 25 August 1981.
- c. Joint Agreement for Product Assurance Selected Program Reviews, HQ DARCOM and HQ DLA, 19 February 1981.
- 2. Statement of Recommendation: "Improve DCAS support to Army Contracts" with supporting recommendations:
 - a. "DARCOM actively participate in executive council activities.
 - b. DARCOM and DLA continue commitment to Joint Program Reviews.
 - (1) Establish an informal process for Joint Performance Reviews.
 - (2) Establish a dispute resolution process."
- 3. Rationale for Recommendation: The study states that the principal contract administration difficulties center on product quality. The DCAS accepts products from the contractor, but the Army retains responsibility to the user for product quality. DARCOM and DLA have developed mechanisms for identifying and resolving mutual problems. The study recommends continued DARCOM commitment and active participation in these activities.
- 4. Analysis of Recommendation: Implementation of the recommendation is underway and will continue.
- August 1981. DARCOM is sponsoring the next meeting which had to be slipped from an earlier date and is now rescheduled for 27-28 April. (The Council Charte states that meetings will occur semiannually or more frequently when agreed to by the principals to consider issues of an urgent nature.) DARCOM is an active participant in the Council and subsequent issues resolution.

b. DARCOM and DLA have not initiated any further Joint Program Reviews since the conclusion of the Ammunition Metal Parts Review. A Joint Program Review is under consideration for May 1982 at TACOM. The resolution of issues and findings resulting from the Ammunition Metal Parts Review confirmed the value of the Joint Agreement (reference 1c) as a basis for establishing the informal links for subsequent joint reviews and dispute resolutions.

5. Benefits of Recommendation:

- a. The Joint Contract Administration Coordinating Council provides a senior level forum for advancing ideas and recommendations concerning major contract administration policy issues and concerns. It provides a mechanism for initiation of improvements in the efficiency and effectiveness of contract administration services. Council activities further promote a spirit of cooperation among all contract administration activities.
- b. The Joint Program Reviews enable the focused examination of selected procurement/production facilities by a team of DLA and DARCOM specialists to determine the overall effectiveness of Army/DLA Procurement Product Assurance policies, procedures, and practices. As stated in the study, the initial review resulted in 126 joint recommendations for improvements. Continuing informal coordination between DLA and DARCOM provides for a strong expectation of similar improvements from future reviews.
- $6.\,$ Resources Required for Implementation: DARCOM is funding within available resources.
- 7. Method of Implementation: Recommendation is being implemented by responsible DARCOM offices through normal management channels.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: HQ DARCOM (DRCPP, DRCQA), and OASA(IL&FM) concur.

TOPIC: WEAPONS SYSTEM OPERATING AND SUPPORT COST (O&SCMIS)

RECOMMENDATION NUMBER: 40

STUDY LOCATION (VOLUME-PAGE): 7-50 to 7-65

PROPONENT OFFICE: HQDA COA (DACA-CAC)

- 1. Reference Study of Army Logistics 1981, Section 7, pages 7-50 to 7-65.
- 2. Statement of Recommendation: "HQDA should continue to support efforts to develop the Weapons System Operating and Support Cost (O&SCMIS) data base."
- 3. Rationale for Recommendation:
- a. The Army is making decisions to procure and field new weapons based on estimates of costs required to operate and support the entire system. Unfortunately, there is no equivalent system-based instrument in place for collection of historical data on O&S costs by type of equipment or by weapon system.
- b. By memo dated January 1974, the DEPSECDEF directed the Army, Navy, and Air Force to develop a data base which would give greater visibility and management control over operating and support costs. The Army changed the name of its effort from VAMOSC to O&SCMIS (page 7-25).
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. In October 1976, HQDA tasked DARCOM to prepare a detailed plan for the development of an O&S cost information system. The subsequent studies by DARCOM identified the deficiencies in current data and the necessity for developing a comprehensive historical data base as the foundation for a system capable of meeting the intended uses for an O&S cost reporting system.
- b. In January 1979, revised and updated "General/Detailed Functional System Requirement" and "MIS Economic Analysis" documents were published; they were approved by the Assistant Secretary of the Army (IL&FM) in July 1979. DARCOM had decided that the detailed software development required specialized narrow skills and in September 1979, GENASYS Corporation, with Management Consulting and Research, Inc., as a subcontractor, was engaged as the software development contractor to conduct ADP design and software development for O&SCMIS.
- c. Since 1979, the O&SCMIS project has progressed through Concept Development, Definition/Design, and on 15 December 1981, entered Program Development. On 3 November 1981, HQ DARCOM and the Deputy Chief of Staff for

Logistics signed a Memorandum of Understanding for data processing support for the O&SCMIS product. Initial deployment and operations of O&SCMIS is scheduled for FY 83.

- 5. Benefits of Recommendation: With the establishment of a reliable historical record of costs by weapon system, the Army's ability to program and budget for, and allocate, its resources will be enhanced.
- 6. Resources Required for Implementation: The future impact of O&SCMIS on Army resources is still being evaluated.
- 7. Method of Implementation:
- a. In October 1976, HQDA tasked DARCOM to prepare a detailed plan for the development of an O&S cost information system.
- b. In January 1979, DARCOM engaged the consulting services of GENASYS Corporation and Management Consulting and Research, Inc. (MCR), to design the appropriate ADP system and software for O&SCMIS.
 - c. Initial deployment is scheduled for FY 83.
- 8. Relationship to Other Studies:
- a. The Modernization Resource Information Submissions (MRIS) is another Army initiative to develop estimates of O&S costs required to support new weapons systems as they are fielded by MACOMs.
- b. An effort is currently underway to investigate the interface between MRIS and O&SCMIS information systems.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Section 7, recommend that HQDA continue to support MRIS. The MRIS system focuses primarily on estimating the future O&S costs of new weapons systems. The O&SCMIS focuses primarily on historical O&S costs of older systems as well.
- 10. Coordination: OASA(IL&FM), ODCSRDA, AFMCO, and DARCOM concur.

TOPIC: PRODUCE SOLDIERS FOR TECHNICAL COMPLEXITY/IMPROVE ENLISTED

TRAINING

RECOMMENDATION NUMBERS: 41, 128, 128 A-D

STUDY LOCATION (VOLUME-PAGE): Annex D, 25-202

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRI)

1. Reference Study of Army Logistics - 1981, Section 25.

- 2. Statement of Recommendations: "Produce soldiers for technical complexity and improve enlisted training:
 - a. Teach required skill level 1 tasks in AIT.
 - b. Continue ad hoc training program developed at installation level.
 - c. Include more theory in formal training.
 - d. Optimize number of tasks in logistics MOS."
- 3. Rationale for Recommendations: Study of Army Logistics 1981 findings concluded that advanced individual training programs do not produce fully qualified graduates in logistics MOS, trainees in MACOM ad hoc training programs are not given credit for attendance and performance, resident training programs in maintenance MOS do not provide theory oriented training and the number of tasks in logistics MOS are not reviewed or adjusted regularly.

4. Analysis of Recommendations:

a. Teach SL1 tasks in AIT - Implementation of recommendation is resource intensive and precludes full implementation. TRADOC is addressing this issue as "Assignment Oriented AIT" in Army Training Study - 1990. Currently TRADOC teaches approximately two-thirds of the SL1 tasks in AIT. During Army Training Study - 1990 each school commandant, as proponent for each MOS, will retain responsibility for SL1 training and authority for associated decisions. The decision framework for determining how many SL1 tasks will be taught in AIT will be tied directly to the complexity of technology involved in specific MOS skills, the density of the MOS Army-wide and the training environment at the typical unit of assignment of the soldier.

- b. Continue installation level training programs Implementation of recommendation is ongoing. Includes mobile training teams, new equipment training teams, the customer field assistance program and mobile training task forces for reserve components.
- c. More theory in formal training Full implementation of recommendation will not be realized in all MOS's. It will vary by MOS with more theory being provided in some as determined by school commandants. All MOS courses will be reevaluated. It is reasonable to expect that the current Army task oriented training philosophy will be retained in most MOS AIT courses.
- d. Optimize number of tasks in logistics MOS Implementation of recommendation is ongoing. School commandants, as proponent for each MOS, are responsible for AIT course design, review of CMFs, MOS overload and ASI training. Army Training Study 1990 will require in-depth review of each MOS.
- 5. Benefit of Implementation: The review of each MOS by proponent school will satisfy recommendations and result in improved enlisted institutional training.
- 6. TRADOC, US Army Logistical Center and ODCSLOG concur.

TOPIC: NEW EQUIPMENT TRAINING

RECOMMENDATION NUMBER: 42

STUDY LOCATION (VOLUME-PAGE): 25-203

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRS)

1. Reference:

a. Study of Army Logistics-1981, Section 25, Page 25-203.

- b. AR 350-35, New Equipment Training dated 1 Nov 81.
- 2. Statement of Recommendation: "Provide Reserve Components Opportunity For NET."

3. Rationale for Recommendation:

Reserve Component units make up the bulk of the combat service support units in the total Army. These units have not been included in new equipment training plans and their access to the new equipment, associated training devices, and training support materials is limited.

4. Analysis of Recommendation:

Implementation of the recommendation is ongoing and will continue.

- a. The New Equipment Training (NET) regulation (AR 350-35), effective 1 December 1981, now applies to both active and reserve components. The Training Directorate is rewriting this regulation not only to train persons in how to operate and maintain new systems, but also how to shoot and/or employ them.
- b. The Army Training Support Center (ATSC) at Ft Eustis is developing concepts for training Reserve Component maintenance personnel using as a vehicle the M-1 Abrams Tank Maintenance requirements. ATSC has further refined the Logistics Management Institute study and is developing several alternatives to train RC personnel.
- c. On 10 March 1982, the Director of Training dispatched a message to the MACOM's emphasizing the importance of their participation in the upcoming Training and Support Work Group (TSWG) meetings convened to update NET plans. Specific emphasis was placed on the identification and inclusion in the NET plans of all AC and RC DS, GS and depot maintenance units.

- 5. Benefits of Implementation: RC CSS units included in NET, will not only receive the training they need, but have ready access to training devices and the training materials essential to sustain training.
- 6. Coordination: DARCOM, FORSCOM, and TRADOC concur.

TOPIC: TRAINING (SKILL PERFORMANCE AIDS PROGRAM)

RECOMMENDATION NUMBER: 43

STUDY LOCATION (VOLUME-PAGE): 25-203

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- a. Study of Army Logistics 1981, Section 25, Pages 170-180, and page 203.
- b. DARCOM Study "Independent Assessment of Skill Performance Aids" implemented July 1981.
- c. DARCOM Study "Assessment of Selected Army Technical Documentation" scheduled for implementation April 1982.
- 2. Statement of Recommendation: "That DA ODCSLOG Assess Value of Skill Performance Aids Program (SPAS)."
- 3. Rationale for Recommendation: The study states that SPAS manuals are costly and more voluminous than predecessor manuals, and their effectiveness is not established.
- 4. Analysis of Recommendation: Implementation is ongoing and will continue.
- a. The Producer Policy Branch, Directorate for Supply and Maintenance, is responsible for formulating basic HQDA policies and coordinating the SPAS Program.
- b. DARCOM has been designated principal field manager with TRADOC assisting.
- c. ODCSLOG provides a representative to the SPAS Working Group which is hosted and chaired by the CG, DARCOM. The Working Group representatives are from HQDA ODCSLOG, DARCOM, TRADOC, FORSCOM, USACC, and INSCOM. All facets relating to SPAS program implementation are discussed, including establishment of priorities, and review of ongoing actions.
- d. As required, HQDA ODCSLOG personnel visit field activities and organizations, and are continually reviewing SPAS actions within Army.

- e. Commander DARCOM, in coordination with TRADOC, tasked US Army Materiel Systems Analysis Activity (AMSAA) to perform an assessment of the SPAS Program scheduled for implementation April 1982.
- 5. Benefits of Implementation: In general, analysis will seek to identify those parameters of the system, manuals, policy, and development process which most affect the usability of the manuals; these findings should provide improved guidance for future publications decisions.
- 6. Resources Required for Implementation: The study is expected to require 18 man-months over a six-month period. The in-house analysis of technical manuals is expected to occupy two junior analysts for approximately three months. The preparation of data requests, responses, and coordination should require one analyst over a two-month period. The user interviews will require at least one month, with perhaps four people visiting the field sites. The analysis is expected to take two analysts about three months.
 - a. This recommendation is being implemented using available resources.
- b. There is no shortfall of resources needed to support operations of the ${\sf SPAS}$ Working Group.

7. Method of Implementation:

- a. US Army Materiel Systems Analysis Activity (AMSAA) has been tasked by Commander, DARCOM, in coordination with TRADOC, to perform an assessment of the SPAS Program. In order to derive the greatest benefit from the assessment of SPAS, non-SPAS as well as SPAS programs will be examined.
 - b. Funds are provided through appropriations which support AMSAA.
- c. AR 310-3 Preparation, Coordination, and Approval of Department of the Army Publications, Chapter 8, Section VI, Skill Performance AIDS (SPAS), requires the CG, DARCOM, to chair a committee to provide direction for operation of the program with representation from HQDA, DARCOM, TRADOC, FORSCOM, USACC, and INSCOM as a minimum.
- 8. Relationship to Other Studies: AMSAA performed an assessment of the SPAS Program associated with the M1 Abrams Tank, which was completed 31 July 1981. At that time the M1 tank had just undergone development and operational testing, stage II (DT/OT II). Due to this timing, the findings of that assessment could not be presented as conclusive. AMSAA recommended an extension of the assessment, specifically to other Army

systems in addition to the M1 tank. Although there is no system now in the field with technical manuals (TM's) representative of a fully implemented SPAS approach (the first of which will be AAH-64, Apache helicopter), sufficient experience does appear to be available to warrant an in-process-review of Army technical documentation.

- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: OASA(IL&FM), DACS, OF SOPS, ODCSRDA, ODCSPER, COA, OCAR, NGB, DARCOM, and TRADOC concur.

TOPIC: DUAL SPECIALTY TRAINING

RECOMMENDATION NUMBER: 44

STUDY LOCATION (VOLUME-PAGE): 25-130 thru 25-133

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRI)

- a. Study of Army Logistics 1981, Section 25, Page 130-133.
- b. Review of Education and Training for Officers (RETO), 30 June 1978.
- 2. Statement of Recommendation: "That DA ODCSOPS determine need for formal training for officers entering dual specialty."
- 3. Rationale for Recommendation: Study cited Specialty Code 91 as an example and stated that "currently, ad hoc training programs such as this one from the Ordnance school are all that is available. Only a small number of officers are able to take advantage of these programs."
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. In August 1981, DA DCSOPS tasked TRADOC and DARCOM to determine additional specialty qualification requirements by specialty code, develop training strategies to satisfy those requirements and determine associated resource requirements.
- b. RETO officer job/task analysis will be used to determine additional specialty training requirements.
- 5. Benefits of Implementation: Systematic determination of need for formal additional specialty training on a specialty basis will provide solid rationale for use to enter budget cycle and ultimately result in a better qualified Officer Corps.
- 6. Resources Required for Implementation: RETO PDIP T006 provides resources for officer job/task analysis. Resources will be required to implement additional specialty training once the extent of the requirement has been determined.
- 7. Method of Implementation: Training Directorate, ODCSOPS, has DA staff responsibility for training and will maintain impetus of implementation.

- 8. Relationship to Other Studies: Review of Education and Training for Officers recognized that"...measures must be taken to ensure the officer is trained (or already possesses sufficient expertise) in his/her alternate specialty."
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: ODCSPER, ODCSLOG, PA&E, TRADOC, DARCOM and the ALA functional area point of contact for logistics training concur.

TOPIC: MOBILIZATION PLANNING

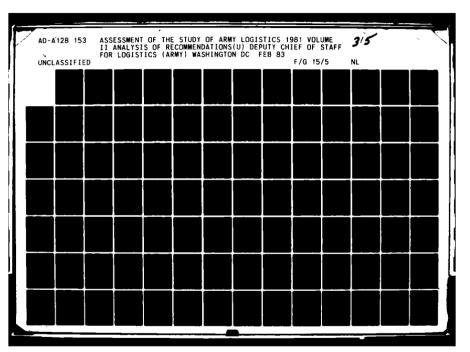
RECOMMENDATION NUMBER: 45

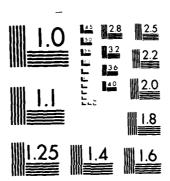
STUDY LOCATION (VOLUME-PAGE): Section 28, D-36

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-ODM)

1. Reference: Study of Army Logistic, Section 28.

- 2. Statement of Recommendation: "Improve Mobilization Planning; establish a cabinet level office of mobilization planning."
- 3. Rationale for Recommendation: This recommendation is intended to improve industrial preparedness and interagency mobilization planning.
- 4. Analysis of Recommendation:
- a. The President has approved the establishment of the Emergency Mobilization Preparedness Board, an interdepartmental organization intended to provide interagency coordination and formulate national mobilization policies and plans. The board consists of senior officials (Deputy or Under Secretaries) of major Federal agencies and is chaired by the Absistant to the President for National Security Affairs.
- b. Eleven Principal Working Groups, subordinate to the board, were formed in August. DOD chairs two of the Principal Working Groups, Military Mobilization and Emergency Communications, and is represented on eight others including the Industrial Mobilization Working Group. The Army Staff has provided the DOD representative to the supporting staff of the Board.
- c. The formation of the Emergency Mobilization Planning Board meets the criteria of the Study recommendation of formation of a cabinet level office for mobilization planning and has the pot ntial to improve mobilization planning and coordination at the national level.
- 5. ODCSRDA, OUSD(P), OJCS, and OASA(M&RA) concur.





MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS 1963 A

1

:

÷

.

TOPIC: MINERALS POLICY

RECOMMENDATION NUMBER: 46

STUDY LOCATION (VOLUME-PAGE): D-36

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- a. Study of Army Logistics 1981--page 34.
- b. Public Law 96-479, National Materials and Minerals Policy Research and Development Act.
- 2. Statement of Recommendation: "Develop National Minerals Policy."
- 3. Rationale for Recommendation: Reduce our foreign dependency on critical materials.
- 4. Analysis of Recommendation:
- a. Implementation is an ongoing OUSDR&E (Acquisition Management) effort. Reference 1b directs the Secretary of Defense to prepare a report "assessing critical materials needs related to national security and identifying the steps necessary to meet those needs."
- b. To assist in this report, the Under Secretary of Defense for Research and Engineering requested that the Institute for Defense Analysis (IDA) conduct a preliminary assessment of DOD's needs for critical materials to ensure national security. In addition, the Army served as lead in the compilation of Service research and development recommendations for substitutes for critical materials.
- c. The draft report was coordinated with the Services and the final report is currently being reviewed by OMB prior to submission to Congress.
- d. The Army agrees with the intent of the recommendation and ODCSRDA will continue to support the DOD effort through participation in the Interagency Materials Availability Steering Committee. However, since action is dependent on final Congressional approval and OUSDR&E implementation, milestones cannot be predicted by the Army.
- 5. Benefits of Implementation: A uniform national materials policy to alleviate shortages of critical materials.

- 6. Resources Required for Implementation: Cannot be determined prior to the development of policy.
- 7. Method of Implementation: Army implementation through AR 700-90, Army Industrial Preparedness Program. Further implementation will depend on OSD guidance, when developed.
- 8. Relationship to Other Studies: Recommendation is directly related to reference 1b.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendation 46, "Develop National Minerals Policy," and 47, "Redesign Model for Stockpile of Strategic and Critical Minerals," are related in that both support an effort to insure the availability of critical materials needed for national security. However, both require decisions and implementation by OUSDR&E (Acquisition Management).
- 10. Coordination: HQ DARCOM (DRCPP-IM) and OASA(RDA) concur.

TOPIC: STRATEGIC MATERIAL STOCKPILE MODEL

RECOMMENDATION NUMBER: 47

STUDY LOCATION (VOLUME-PAGE): D-22

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

- a. Reference Study of Army Logistics 1981--page 34.
- b. Statement of Recommendation: "Redesign Model for Stockpile of Strategic and Critical Materials."
- c. Rationale for Recommendation: To improve the methodology for determining requirements for materials to support a national emergency.
 - d. Analysis of Recommendation:

There is no evidence that the existing methodology for determining stockpile goals is inadequate. The stockpile of strategic and critical materials is a national effort and managed by the Federal Emergency Management Agency. The Presidential planning guidance calls for a stockpile capable of supporting the United States military, industrial, and essential civilian needs for three years during a national emergency. It is assumed that prior industrial mobilization with increased use of raw materials will occur, that austerity measures will be in effect, and that the highest priority for acquiring needed materials will be given to readiness for the first year. These guidelines are incorporated into the econometric model used to estimate stockpile goals. The data used cover consumption, production, capacity, imports and exports, and are revised on a continuing basis.

- e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics-1981: Recommendation 46, "Develop National Minerals Policy," and 47, "Redesign Model for Stockpile of Strategic and Critical Minerals," are related in that both support an effort to ensure the availability of critical materials needs to national security. However, both recommendations require decisions by OUSDR&E (Acquisition Management).
 - g. HQ DARCOM (DRCPP-IM) and OASA(RDA) concur.

3. Recommendations:

- a. That the Army not embark on a separate or individual effort to develop a methodology for computing national stockpile goals.
- b. That the Army continue to keep abreast of current activities involving the stockpile and, should the need arise, provide assistance in the development of necessary adjustments to further improve the modeling system. The Army is an active participant in the Interagency Materials Availability Steering Committee.

TOPIC: NATIONAL CRITICAL SKILLS

RECOMMENDATION NUMBER: 48

STUDY LOCATION (VOLUME-PAGE): 10-78

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- 1. Reference Study of Army Logistics--1981, Annex D, page D-36, and Section 10, page 10-78.
- 2. Statement of Recommendation: "Institute National Critical Skills Training Effort."
- 3. Rationale for Recommendation: Obtain sufficient skilled labor to meet the needs of American industry.
- 4. Analysis of Recommendation:
- a. Skilled manpower shortages are prevalent throughout industry and result in increasing leadtimes for defense products and a lessening of quality for those products. The Army has recognized this problem and in conjunction with the other Services has supported the DOD Action Plan for the Improvement of Industrial Preparedness. One of the key elements in improving our national resource base in the DOD Action Plan is obtaining sufficient skilled labor.
 - b. The DOD Action Plan addresses the following:
 - (1) The civilian workforce for mobilization.
 - (2) Cooperative efforts with Industrial Associations.
 - (3) Publicizing the "Tools for Schools Program".
 - (4) Establishing interface with American Vocational Associations.
- c. Implementation of the DOD Action Plan is being coordinated by a Secretariat level steering committee supported by a Joint Service Task Force.
- 5. Benefits of Implementation: Reduced production leadtimes, improved quality of product, and a skilled manpower base to support mobilization.

- 6. Resources Required for Implementation: This recommendation is being fully implemented through the DOD Action Plan using available resources.
- 7. Method of Implementation: Actions are implemented through the Secretariat level steering committee by the Joint Service task force.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by any other recommendation within this study.
- 10. Coordination: HQ DARCOM (DRCPP-I) and OASA(RDA) concur.

TOPIC: INVESTMENT TAX CREDITS

RECOMMENDATION NUMBER: 49

STUDY LOCATION (VOLUME-PAGE): 10-54

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- a. Study of Army Logistics 1981, Section 10, page 54, and Annex D, page 36.
 - b. Economic Recovery Tax Act of 1981, P.L. 97-34, August 13, 1981.
- 2. Statement of Recommendation: "Enact Legislation Providing Favorable Investment Tax Credits."
- 3. Rationale for Recommendation: Provide incentive for private enterprise to increase capital investment.
- 4. Analysis of Recommendation:
- a. During the past decade, the average rate of investment for all US industry was approximately eight percent of sales and the average rate for all US manufacturing firms was four percent of sales. The report of the Defense Industrial Base Panel of the Committee on Armed Services, House of Representatives, Ninety-Eighth Congress, found that tax and profit policies appear to discourage capital investment in new technology, and facilities and equipment that would increase productivity and improve the industrial base.
- b. When the Study of Army Logistics 1981 was completed, the Economic Recovery Tax Act of 1981 was still pending and the study recognized the legislation as pending.
- c. The Army supported reference 1b, since it provided the business incentives necessary to spur capital investment.through:
 - (1) Cost Recovery Provisions.
 - (2) Investment Tax Credit Provisions.
 - (3) Incentives for Research and Experimentation.
 - (4) Small Business Provisions.
 - (5) Other Miscellaneous Provisions.

- 5. Benefits of Implementation: Increased productivity of defense industrial base as a result of greater capital formulation.
- 6. Resources Required for Implementation: None since recommendation is already implemented.
- 7. Method of Implementation: Congress has already passed the legislation. Further implementation by the Army is not necessary.
- 8. Relationship to Other Studies: Recommendation is directly related to reference 1b.
- 9. Relationship to Other Recommendations within Study of Army Logistics 1981: This recommendation is not paced or influenced by another recommendation. However, this recommendation is related to number 31, "Correct Serious Decline in National Industrial Capability," in that both recommendations strive to improve the industrial base through an increase in productivity.
- 10. Coordination: HQ DARCOM (DRCPP-I) and GASA(RDA) concur.

TOPIC: PROGRESS PAYMENTS

RECOMMENDATION NUMBER: 50

STUDY LOCATION (VOLUME-PAGE): 10-54

PROPONENT OFFICE: HQDA COA (DACA-FAC)

- 1. Reference Study of Army Logistics 1981, Section 10.
- 2. Statement of Recommendation: "The study recommended that progress payment rates be increased." NOTE: Our response states that progress payment rates recently had been increased by the Secretary of Defense and implemented by Army Acquisition Letter 81-11 dated 10 September 1981. The new standard progress payment rates are 90 percent of costs for other than small business and 95 percent of costs incurred for small business.
- 3. Rationale for Recommendation: To improve contractors' cash flow/working capital, the need for which was brought on by tight money market, high interest, and inflation pressures.
- 4. Analysis of Recommendation:
- a. The increase in the progress payment rates was directed by OUSD memorandum, 28 August 1981, to the various service assistant secretaries concerned with procurement, subject: Flexible Progress Payments, signed by Robert F. Trimble, Acting Deputy Under Secretary (Acquisition Management).
- b. This policy was implemented in the Army by Army Acquisition/Letter 81-11, 10 September 1981.
- 5. Benefits of Implementation: The increased progress payment rates will provide some financial relief in today's tight money market to both small and large defense contractors. It will reduce financial failures, help ensure completion and deliveries on contracts, and encourage more investment by contractor on defense related assets.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: Mechanism already established to effect increases.

- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: The increase in progress payments was directed by OUSD. See paragraph 4 above.

TOPIC: CONTRACT MANAGEMENT

RECOMMENDATION NUMBER: 51

STUDY LOCATION (VOLUME-PAGE): 10-54

PROPONENT OFFICE: HQDA COA (DACA-FP)

- 1. Reference Study of Army Logistics 1981, Annex D, Section
- 2. Statement of Recommendation: "That the Defense Authorizat a Act of 1976 be revised to permit inclusion of recurring costs in termination is ability."

That DOD Directive 7200.4 be revised to permit multi-year (.acting.

That the \$5 million contract cancellation ceiling be rescinded.

- 3. Rationale for Recommendation: Encourage and enable managers to perform more effectively and economically with due regard for the effect upon readiness of their actions.
- 4. Analysis of Recommendation: Implementation of recommendation is dependent upon DOD's implementation of enacted statutory authority. Virtually all of the recommended actions are authorized by section 909 of the Department of Defense Authorization Act, 1982, Public Law 97-86; however, there are limiting provisions in the Department of Defense Appropriations Act, 1982, Public Law 97-114, which have the effect of making full implementation impossible at this time. The ASD(C), together with the OGC, is attempting to resolve problems arising due to limiting provisions inserted in the DOD Appropriations Act for 1982, enacted after the Authorization Act.
- 5. Benefits of Implementation: More efficient and economical planning and execution of defense acquisition process.
- 6. Resources Required for Implementation: No additional resources are required to implement.
- 7. Method of Implementation: Existing TDA within HQDA is adequate.
- 8. Relationship to Other Studies: This recommendation is closely allied with the "Carlucci Initiatives" as embodied in the Acquisition Improvement Task Force, specifically initiative number 16--Funding Flexibility.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: None required.

TOPIC: REQUIREMENTS

RECOMMENDATION NUMBER: 52

STUDY LOCATION (VOLUME-PAGE): 5-136

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDF)

- a. Study of Army Logistics 1981, Section 5, pages 5-3 to 5-137.
- b. Draft AR 71-11.
- 2. Statement of Recommendation: "Stabilize force structure, sustainability, and funding guidance."
- 3. Rationale for Recommendation: Recommendation was made in the context of equipment procurement for the Army. The study states that frequent changes in force structure, sustainability, and funding ruidance have significant impact upon procurement of Army equipment.
- 4. Analysis of Recommendation: Implementation of recommendation will be accomplished consistent with the ARSTAF ability to control the pertinent variables.
- a. Total Army Analysis (TAA), used to determine the Army's total force structure requirement, will be conducted biennally beginning with the TAA-88. The off year will be dedicated to sensitivity and supplementary analyses. As a result, the force structure should become more stabilized and provide additional opportunities for in-depth analyses.
- b. "Sustainability" as defined in the Study of Army Logistics refers to War Reserves. Sustaining requirements (War Reserves) are a function of total force Initial Issue Quantities (IIQ), days of support required, and either Wartime Replacement Factors (WARF) or ammunition rates. Additionally, both WARF and ammunition rates are affected by changes in IIQ, deployment schedules, systems performance factors, doctrine/tactics, threat, and density of equipment. A change in one, or all, of the above factors will result in a change in War Reserves.
- (1) Stability in total force IIQ will be improved by action in paragraph a.
- (2) Equipment requirement stabilization can be assisted by rigid adherence to DA TOE standardization policy.

- (3) WARF and ammunition rate studies have been changed from annual to biennial and will be run concurrently with TAA studies. In addition to reducing rate turbulence, greater opportunities are provided to scrutinize the rates and challenge results where appropriate.
- (4) AAOs will be subjected to a "senior leadership" review whereby changes in individual item AAO will be approved/disapproved or justified. Such an action could be a major step towards stabilizing the procurement process.
- c. Stability of funding guidance may be the most volatile factor of all. Congress, the President, and Office of the Secretary of Defense are major variables that may impact on funding guidance. While the PPBS provides a discipline to the procedures for establishing funding guidance, changes in programs, priorities, and resources throughout the year can result in significant modifications to equipment buys and procurement policies. The OMA appropriation has moved to stabilize funding guidance by providing maximum levels within the law and as early as possible within the fiscal year. External constraints such as operating under Continuing Resolution Authority (CRA) program supplementals are the basis for the majority of adjustments to the funding program.
- 5. Benefits of Implementation: The stabilization of force structure, sustainability, and funding guidance will result in a more realistic procurement policy that more accurately reflects the Army's time-phased material needs.
- 6. Resources Required for Implementation: The recommendation is being implemented using personnel resources currently authorized on the ARSTAF. Additional on-line ADP support would permit more complete analyses of the many complex variables.
- 7. Relationship to Other Studies: None.
- 8. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is consistent in part with the other following recommendations in this study:
 - a. No. 18 "Run TAA, rates/factors less freq; allow analysis time."
 - b. No. 21 "Make changes to the force structuring process."
 - c. No. 21a "Discipline the force change process; measure impacts."
- d. No. 21b "Change force structure process to either a 2- or 3-year cycle."
- 9. Coordination: ODCSOPS, ODCSRDA, ODCSLOG, Comptroller concur.

TOPIC: REQUIREMENTS

RECOMMENDATION NUMBER: 53

STUDY LOCATION (VOLUME-PAGE): 5-136

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FD)

1. PURPOSE: To recommend that the Director of the Army Staff not adopt Recommendation 53.

2. DISCUSSION:

- (1) Study of Army Logistics 1981--pages 5-24 thru 5-72.
- (2) General Research Corporation (GRC) study--Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS), September 1979. (Contract MDA903-78-C-0445).
- b. Statement of Recommendation 53: Redesign requirements system-SACS-to provide on-line process to reflect modernization of equipment and people.
 - c. Rationale for Recommendation 53:
- (1) The Logistics 1981 study states that Basis of Issue Plans (BOIP) and Qualitative and Quantitative Personnel Requirements Information (QQPRI) are neither accurate nor timely.
- (2) The study points out that late QQPRI result in delayed final Military Occupational Specialty (MOS) decisions for new equipment, and this in-turn delays Tables of Organization and Equipment (TQE) development.
- (3) Further, the study states that discontinuity can be introduced into LOGSACS by the Shorthand Note system. This system is the means by which the Force Integration Staff Officer (FISO) compensates for inaccuracies in LOGSACS source documents.
 - d. Analysis of Recommendation 53:
- (1) The BOIP and the TOE, both developed by TRADOC, and The Army Authorization Documents System (TAADS), developed by MACOMS, are feeder systems for LOGSACS. The recommendation to process SACS on-line, at HQDA, will not correct the problems of inaccurate and late BOIP/QQPRI and TOEs. These problems must be addressed to the proponents.

- (2) Accurate and timely submission of BOIP/QQPRI, TOE, and TAADS documents will reduce the number of shorthand note corrections applied by FISOs. This will reduce discontinuity and the time required for FISO analysis during SACS processing.
- (3) Modernization will be more accurately reflected when the capability to phase the application of BOIPs in LOGSACS and PERSACS is developed. See paragraph e (2).
- (4) The Logistics 81 study states that the study recommendations are designed to introduce stability into the requirements processes. However, the concept for an on-line process is that continuous modification actions are required. An on-line LOGSACS would increase rather than decrease fluctuations in requirements.
 - e. Relationship to other studies:
- (1) The requirements for an on-line SACS were studied by GRC (reference 2a(2)) from 1 September 1978 to 31 August 1979.
- (2) Although the evaluation of the GRC study determined that an on-line SACS was not practical with the configuration of the current feeder systems, certain recommendations impacting modernization were adopted. Contracts were initiated to develop software to permit the phased application of BOIP in LOGSACS and PERSACS, and to add the Shorthand Note system to PERSACS. The operational capability of a contractor-developed program to phase BOIPs in LOGSACS is now being evaluated by the Force Accounting and Systems Division of ODCSOPS and the US Army Management Systems Support Agency. The effort to phase BOIPs and add the Shorthand Note system to PERSACS is 90 percent complete. Completion of this effort, however, is contingent upon the successful operation of the contractor-developed software for phased BOIP in LOGSACS.
- (3) Further, the Mission Element Needs Statement for a Force Management Decision System (FMDS) is under joint development by the Force Management Directorate and the Requirements Directorate, ODCSOPS. FMDS will provide rapid data retrieval and on-line data manipulation from the following systems: SSACS, TOE, BOIP, Total Army Equipment Distribution Plan, and the Procurement Data Base.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendation 54 is: "Revise PERSACS procedure to permit use of BOIP/QQPRI rather than TAADS for personnel planning." This recommendation relates to recommendation 53 in that PERSACS processing would be included in any on-line concept addressed by recommendation 53.
- g. ODCSLOG, ODCSRDA, ODCSPER, and the Army Logistics Assessment point of contact for Major Items concur.
- 3. RECOMMENDATION: Do not adopt Recommendation 53.

TOPIC: PERSACS

RECOMMENDATION NUMBER: 54

STUDY LOCATION (VOLUME-PAGE): 5-136

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MBC)

- 1. Reference Study of Army Logistics 1981, Section 5.
- 2. Statement of Recommendation: "Revise PERSACS procedure to permit use of BOIP/QQPRI rather than TAADS for personnel planning."
- 3. Rationale for Recommendation: The specific improvement to PERSACS in this recommendation will alter the way manpower is impacted by the introduction into the force of materiel systems or new organizations. Under the current system manpower is stated as required as of the system IOC. In reality materiel systems are introduced over time so that the requirement for additional manpower or new skills should be phased. Additionally, the use of Basis of Issue Plans (BOIP) and Qualitative and Quantitative Personnel Requirements Information (QQPRI) will make TRADOC and MILPERCEN cognizant of these changes up to two years before they would have been documented in TAADS. The recommendation is being addressed by a contractual effort which will provide a method of phasing manpower requirements in PERSACS through use of BOIP/QQPRI.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Manpower Management and Analysis Division of the Manpower, Programs and Budget Directorate has ODCSPER responsibility for Basis of Issue Plans (BOIP) for new equipment that will have personnel impact.
- b. The "BOIP in PERSACS" effort is an addendum to the FORCAST contract of the Assistant Secretary of the Army for Manpower/Reserve Affairs which furnishes the contracting officer representative. The BOIP in PERSACS contract expired late last year with 90 percent of the tasks completed. A new contract is being staffed which will take approximately one month. Once initiated, it will take approximately three months to complete the remaining tasks. However, the operation of the BOIP in PERSACS, as currently designed, is contingent upon the completion of the phased BOIP in LOGSACS effort; projected for completion no earlier than August 1982.
- c. PERSACS is currently being produced each quarter and forms the basis for promotion, recruitment, training, and distribution of personnel. The Military Personnel Center constructs several products from PERSACS for these purposes.

- 5. Benefits of Implementation: Inclusion of BOIP in PEPSACS will provide a more accurate portrayal of the Army force requirements. As a consequence more accuracy will be discernible in all matters affecting promotion, recruitment, training, and distribution.
- 6. Resources Required for Implementation: This recommendation is being fully implemented using available resources.
- 7. Method of Implementation: Contract is an addendum to the FORCAST effort of MRA. Funds are appropriated for this purpose.
- 8. Relationship to Other Studies: None directly. Indirectly will affect all organizations due to the enhanced ability of MILPERCEN to be cognizant of manpower requirements which are more reflective of reality.
- 9. Relationship to Other Recommendations: This effort is closely allied with number 53 (Redesign Requirements System SACS) as PERSACS is a product of SACS. There is no interdependence between the two recommendations.
- 10. Coordination: DASA(MRA), ODCSOPS, and MILPERCEN concur.

TOPIC: AUDIT RATIONALE FOR MAJOR CHANGES IN PROCUREMENT PROGRAMS

RECOMMENDATION NUMBER: 55

STUDY LOCATION (VOLUME-PAGE): 5-136

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPP-B)

- a. Study of Army Logistics 1981, Recommendation 55.
- b. Procurement Summary Increment Report, 2 November 1981 (RDAISA WUA-XXSS 173).
- c. Summary of FY 82 Congressional Actions, 21 December 1981 (RDAISA WUL-XXAP 173).
- 2. Statement of Recommendation: "Provide capability to audit rationale for major changes in procurement programs."
- 3. Rationale for Recommendation: The logistics study states that there is not an existing procedure by which the rationale for major changes made in procurement programs could be tracked. Therefore, it was not possible, after the passage of time, to determine why those changes had been made.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The term "rationale", as used in this paper, is intended to address the specific actions taken during the programing, budgeting, and execution cycle which result in a major change to a given procurement program (i.e., to track actions that have a significant impact upon a procurement program of a particular year as it moves from the POM to the budget and ultimately to execution). It is recognized that a detailed explanation or justification for each change is not always available at the HQDA level (e.g., Congressional modifications to the President's budget, OSD changes imposed by PBD action, and below threshold reprograming actions taken by a major subordinate command). The ODCSRDA system to track the rationale for changes in procurement programs, as described herein, addresses the actions that required the change rather than the detailed justification behind that change.
- b. During mid-1981, the Procurement Programs and Budget Division, ODCSRDA, in conjunction with the USARDA Information Systems Agency (RDAISA), began the development of an automated report (WUA-XXSS 109) to provide an audit trail of changes made between amounts reflected in the budget year column of the current POM to the corresponding entries of the OSD budget request for that same year. For example, the Procurement Summary Increment Report dated 2 November 1981 identified adjustments (made at the Standard

Study Number (SSN) and Program Decision Incremental Package (PDIP) level) to the FY 83 OSD budget request. This information resides in the computerized procurement data base maintained by RDAISA.

- c. Once the budget request is submitted to OSD, another portion of the ODCSRDA system exists that allows the tracking of changes made to the separate SSN line items of the budget which result in the Presidential budget request. This procedure consists of maintaining specific information about changes made to SSN line items by OSD Program Budget Decision (PBD) documents and service reclama actions. By tracking those PBD documents, which can impact amounts in not only the budget year but also the current execution year, it is possible to determine why and where OSD made changes to the Service budget request that resulted in the Presidential budget submission to Congress.
- d. Another automated report (WUL-XXAP 173) prepared by RDAISA tracks, by SSN, those changes made by Congress to the Presidential budget submission that resulted in the final authorization and appropriaton bills passed by Congress. The most recent report, the Summary of FY 82 Congressional Actions, reflects those actions made by Congress to that budget that ended with the final bills. A similar computerized report will be prepared to track Congressional actions to the FY 83 Presidential budget submissions as those decisions are made.
- e. The fourth portion of the procedure by which the rationale behind procurement program changes can be tracked pertains to those changes made in the execution year (e.g., currently this is the execution year for the FY 82 budget). Major changes in procurement programs during the execution year normally require Congressional approval; such changes would be reflected in periodic status reports of reprograming actions prepared by the Procurement Programs and Budget Division. Authorization for below threshold reprograming actions has been delegated below the HQDA level (i.e., to major commands such as DARCOM and USACC); detailed tracking of resultant changes to procurement programs would not be possible without significant modification to that authority or imposition of significant reporting requirements.
- f. In summary, there are four portions to the current ODCSRDA system by which it will be possible to determine at what point in the budget process major changes were made to the procurement programs. This monitoring system will reflect those events that required or prompted those major changes that took the budget request for a given procurement program from the basic starting point (i.e., the POM) to the ending point (i.e., the year of execution) of that budget.
- (1) From the budget year column of the current POM to the OSD budget submission.
 - (2) From the OSD budget to the Presidential budget submission.
- (3) From the Presidential budget to the Congressional authorization and appropriation bills.
- 5. Benefits of Implementation: By having a system in place that tracks procurement programs from the budget year column of the POM until that budget year is actually executed, it will be possible to provide an audit trail for the rationale of changes made to those programs.

- 6. Resources Required for Implementation:
 - a. This recommendation is being implemented using available resources.
- b. There is no known shortfall of resources required to implement and operate this monitoring system as currently envisioned.
- 7. Method of Implementation: Existing offices within HQDA will implement this recommendation. Funds are provided through appropriations which support the Army Staff.
- 8. Relationship to Other Studies: Ongoing internal management analysis action recognized the need for the capability to track such changes as envisioned by this recommendation. A recently implemented monitorship system (i.e., the Program Management Control System) will provide an additional capability to track, from a macro viewpoint, changes in selected procurement programs.
- 9. Relationship to Other Recommendations within the Study of Army Logistics ~ 1981: This recommendation is not influenced by another recommendation within this study.
- 10. Coordination: ODCSOPS, OCOA, PAED, OASA(IL&FM), and OASA(RDA) concur.

FUNCTIONAL AREA: Management and Organization

TOPIC: CONSUMPTION FACTORS

RECOMMENDATION NUMBER: 56

STUDY LOCATION (VOLUME-PAGE): 5-138

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- 1. Reference Study of Army Logistics 1981, Section 5, pages 82 97.
- 2. Statement of Recommendation: "Recompute consumption factors every second or third year."
- 3. Rationale for Recommendation: Currently consumption factors, ammo rates and WARF rates, are computed each year. There is a wide variance each year in many projected rates, some of them swinging back and forth between high and low extremes. This had a "waterfall" effect throughout DARCOM and the production base.
- 4. Analysis of Recommendation: It is a sound recommendation and has been adopted.
- 5. Benefit of Implementation: Decrease turbulence in DARCOM/Production Base.
- 6. Resources Required for Implementation. None. This has already been implemented, albeit independently of Log Study 81.
- 7. Method of Implementation: ODCSOPS instructed CAA to do so. Consumption factors are henceforth to be done every two years.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 81. None.
- 10. Coordination: ODCSOPS concurs.

TOPIC: TAEDP/PEM

RECOMMENDATION NUMBER: 57

STUDY LOCATION (VOLUME-PAGE): 5-138

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMD)

1. Purpose: To recommend that the Director of the Army Staff adopt Recommendation 57.

2. Discussion:

- a. Reference Study of Army Logistics 1981.
- b. Statement of Recommendation: Increase TAEDP/PEM flexibility and make TAEDP/PEM the official distribution plan.
 - c. Rationale for Recommendation:
- (1) The Logistics 1981 study states that TAEDP is being used to project major item equipment distribution.
- (2) Study states that prime impediment to fully utilize TAEDP is its strict reliance on the DAMPL for distribution priority. This results in inaccurate modernization distribution because most modernized equipment is being distributed in non-DAMPL sequence.
- (3) Study further states conflicting distribution sources complicate planning process.
 - d. Analysis of Recommendation:
- (1) TAEDP/PEM was developed and is maintained by DARCOM. It is currently being used by DARCOM as the official requisition validation source for non-modernization items of equipment.
- (2) TAEDP/PEM is the only distribution system which constantly validates unit requirements against on hand quantities and projects distribution based on production availability. This edit process, validating requirements and availability, is extremely important particularly for modernization distribution planning.
- (3) A TAEDP/PEM modernization project is underway specifically to allow greater flexibility in distribution projections. This project will include such additions to the TAEDP methodology as displacement distribution, substitution, and others. Net effect of the TAEDP/PEM modernization project will be to more accurately reflect/analyze questions like modernization distribution. Cost and scope is currently being determined with ODCSLOG, DARCOM, and DESCOM participants.

(4) TAEDP/PEM is already disseminated worldwide to a variety of users to include all MACOMS, all MRCs, and all installations. It is being used as a distribution tool both for planning and execution. The Army needs one single source of distribution data and upon completion of the TAEDP/PEM modernization project, TAEDP would be the only logical source that covers all aspects of major item distribution.

3. Implementation:

- a. No relationship exists between this recommendation and any other recommendation contained in Log Study 81.
- b. This recommendation was coordinated and concurred in by ODCSOPS and HQ DARCOM.
- c. This recommendation can be implemented unilaterally and is not paced by any other recommendation.
- d. ODCSLOG is addressing the resource implication of increasing TAEDP/PEM flexibility and currently sees no need for additional resources. Any change to this will be rapidly surfaced.

4. Recommendations:

- a. Continue TAEDP/PEM modernization planning.
- b. As TAEDP/PEM data proves itself, change AR 700-120 (Materiel Distribution Management for Major Items) to make TAEDP/PEM the only official Army distribution document.
- c. Support first half of recommendation 57, "increase TAEDP/PEM flexibility" and as system proves itself, adopt second part of recommendation 57, "make TAEDP/PEM the official distribution plan."
 - d. ODCSOPS and DARCOM concur with these recommendations

TOPIC: COST ESTIMATING AND SELECTED ACQUISITION REPORTS

RECOMMENDATION NUMBER: 58

STUDY LOCATION (VOLUME-PAGE): 6-114

PROPONENT OFFICE: HQDA COA (DACA-CAW)

1. Reference:

- a. Study of Army Logistics 1981, Section 6.
- b. DAMA-RAZ-A memo, subject: Selected Acquisition Reports (SAR) Improvements, 2 October 1981.
- c. A Report to the Secretary of the Army for the Cost Discipline Advisory Committee, 16 December 1981.
- 2. Statement of Recommendation: "COA and DARCOM form a joint Task Force to examine cost estimating and SAR reporting."
- 3. Rationale for Recommendation: The Army has more SAR cost growth in recent years attributed to cost estimating than the Navy or Air Force. The Log 81 report attributes this to (a) the way cost growth is categorized in the SARs and (b) cost estimating accuracy.

4. Analysis of Recommendation:

- a. As regards SAR reporting, the Log 81 report reveals that the cost estimating category became the catch-all category for all cost changes that cannot be attributed to other categories at about the time that cost estimating cost growth began to occur. Thus the need to examine SAR reporting.
- b. As regards cost estimating accuracy, the Log 81 report identifies two reasons for the cost estimating cost growth: (1) the high percentage of Army systems in production; and (2) the fact that Army SAR systems average less than two years in production whereas the Air Force and Navy average four and five years respectively.
- c. In consideration of paragraphs a and b above, the Log 81 report recommended that COA and DARCOM should, via a task force, examine the subject areas.
- d. The objectives of the subject recommendation (i.e., improved cost estimating and SAR reporting) have been addressed in a comprehensive fashion by two recent studies that are discussed in paragraph 7 below. Therefore, in effect, the recommendation has been implemented and establishment of a task force is not necessary.

- 5. Benefits of Implementation: The benefits are more accurate cost estimating and better representation of cost growth within the SARs.
- 6. Resources Required for Implementation: The substance of the recommendation has been implemented. No further resources are required.
- 7. Method of Implementation: A SAR Review group was established and its findings published in October 1981 (see reference b). The group recommended additional cost growth categories as well as an expansion of the definitions of some of the existing categories. The changes are expected to decrease the amount of cost growth previously attributed to cost estimating. In addition, an Army working group and subsequently an independent Cost Discipline Advisory Committee were established to review cost estimating within the Army (see reference c).
- 8. Relationship to Other Studies: Other studies directly related to this recommendation are addressed in paragraph 7 above.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not directly related to other recommendations within the Log 81 study.
- 10. Coordination: DARCOM's points of contact concur.

TOPIC: COST CONTROL

RECOMMENDATION NUMBER: 59

STUDY LOCATION (VOLUME-PAGE): 6-52 to 6-116

PROPONENT OFFICE: HQDA COA (DACA-CAC)

1. Reference:

- a. Study of Army Logistics 1981, Section 6, pages 6-52 to 6-115.
- b. Vice Chief of Staff Memorandum, 29 July 1981, subject: Program and Cost Control Systems.
- c. Chief of Staff Memorandum, 27 November 1981, subject: Program and Cost Control Systems.
- d. A Report to the Secretary of the Army by the US Army Cost Discipline Advisory Committee, 16 December 1981.
- 2. Statement of Recommendation: "HQDA should approve DARCOM's proposed program cost control system with modification proposed herein:
 - -- 3 Cost Estimates
 - -- TRADOC Included in Contracts
 - -- Each Change Considers a Zero-Cost Growth Alternative
 - -- Total Program Control Needed NOW" (page 6-116)
- 3. Rationale for Recommendation: The Study of Army Logistics presented a summary of cost growth and schedule slippage in Army programs over the last 20 years. The study also identified major factors which contribute to cost growth.
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. VCSA approved implementation of the Program and Cost Control System (now called Program Management Control System PMCS) in the Chief of Staff Memorandum, dated 29 July 1981.
- b. The U.S. Army Cost Discipline Advisory Committee in its report dated 16 December 1981 (p. 68) recommended "that the Program and Cost Control System be reviewed in more detail for the Army's future program needs."

- c. Commander, DARCOM, has ordered a review of the program in accordance with recommendations made by the Cost Discipline Committee. Many of those recommendations were incorporated in the DARCOM Circular 11-1, published in January 1982. The DARCOM review of PMCS is to be completed by June 1982. In the meantime, DARCOM is to proceed with implementation of PMCS.
- d. DARCOM has taken the following action to implement recommendations of the Study of Army Logistics 1981.

(1) Three separate cost estimates:

- (a) The Study of Army Logistics recommended that three separate cost estimates be developed: The PM's Baseline Cost Estimate (BCE); the Materiel Developer's Estimate (MDE); and the HQDA's Independent Cost Estimate (HICE).
- (b) Only one cost estimate will be developed as part of PMCS. The PM will develop a Baseline Cost Estimate (BCE). HQDA will continue to develop Independent Cost Estimates (ICEs) on selected systems.
- (2) TRADOC to be included in Contracts: On 16 November 1981, a Memorandum of Understanding between TRADOC and DARCOM was signed. This MOU provides agreement on participation of TRADOC in PMCS.
- (3) A Zero-Growth Alternative: A zero-growth alternative must be developed, whenever cost growth occurs that can be attributed to program change, scope, threat, inflation, etc. The PM must show how the program would be completed with no real cost growth.
- (4) <u>Total Program Control Needed Now:</u> PMCS for total program control is now being implemented.
- (a) Draft PMCS documentation from four selected PMs (RPV, M-1, FVS, and MLRS) was received at HQ DARCOM during September and October 1981.
- (b) In January 1982, the draft DARCOM Circular was updated and published as Draft DARCOM Circular 11-1.
- (c) To date, PMCS documentation on the system, Multiple Launch Rocket System (MLRS), has been submitted to HQDA for approval. The initial MLRS package was incomplete and returned for changes.
- (d) An additional 35 systems are scheduled to come under PMCS by the end of calendar year 1982. Attached as inclosure (TAB A) is current schedule for submission of PMCS documentation on designated systems to DARCOM. Once staffed and approved at DARCOM, Program Directive Documents (PDD) will be forwarded to HQDA for approval and signature by the DAS.
- 5. Benefits of Implementation: The DARCOM PMCS represents a positive step toward keeping costs and performance schedules within estimates which were derived during the system development stage.

- 6. Resources Required for Implementation: The impact of PMCS on DARCOM and PM resources is now being evaluated by the DARCOM command group. PMCS is only one of many additional requirements that have been imposed on DARCOM and PMs by HQDA requirements, i.e., the Annual Update of BCEs, the Carlucci Initiatives, the CDAC recommendations, and the Nunn Amendment.
- 7. Method of Implementation: In January 1982, the Draft DARCOM Circular for PCCS was updated and published as Draft DARCOM Circular 11-1 and the name of PCCS was changed to Program Management Control System (PMCS).
- 8. Relationship to Other Studies: The Cost Discipline Advisory Committee has recommended a thorough review of PMCS. Numerous changes have already been made and incorporated into the DARCOM Circular on PMCS. Commander DARCOM has ordered that the review of CDAC recommendations be completed by June 1982.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Other recommendations of the Army Logistics Study 1981 were related to identifying and controlling cost growth in the procurement of new weapons systems (i.e., recommendation number 5: COA and DARCOM form a joint task force to examine cost estimating and SAR reporting). However, none of those other recommendations are dependent for completion on PMCS. Similarly, PMCS is not dependent on other Log Study recommendations.
- 10. Coordination: ODCSRDA and DARCOM concur.

IMPLEMENTATION OF PMCS

PMCS DOCUMENTATION SUBMISSION

FROM MSC/PM TO DARCOM

SYSTEM MONTH DUE CH-47 MARCH* FOTS MPG-F BLACKHAWK IR Supp APRIL TOW II FVS AAH HELLFIRE AHIP <u>YAM</u> PLRS/TIDE DIVAD JUNE CHAPARRAL MAINSITE TACFIRE JULY OPTADS AUGUST TACTICAL FUSION HAWK PERSHING II STINGER Aug) COPPERHEAD (1 COBRA (1 Aug) VIPER SEPTEMBER ITV/FISTV AN/TTC-39/TYC-39 MICNS RPV (1 Sep) **ADCCS** SINCGARS (1 Oct) OCTOBER TMDS NOVEMBER BLACKHAWK QUICKFIX M1 staffed being *Currently TACSATCOM (SCOTT) at DARCOM HMMWV

Incl 1

PATRIOT

TOPIC: INITIAL OPERATIONAL CAPABILITY DATES

RECOMMENDATION NUMBER: 60

STUDY LOCATION (VOLUME-PAGE): 6-118

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQR)

1. Reference:

- a. Study of Army Logistics 1981.
- b. HQDA Letter 71-81-3, 2 November 1981, subject: First Unit Equipped (FUE) Initial Operational Capability (IOC) Policies and Procedures.
- 2. Statement of Recommendation: "Gaining commands will declare when IOC has been accomplished. First Unit Equipped (FUE) becomes the date when: (a) Hardware and support are ready and positioned; (b) organic support commences; (c) combat and material developers are "graded" on their performance; (d) focal point for milestones and prefielding reviews."
- 3. Analysis of Recommendation: Implementation of the recommendation is complete:
- a. A System "Fielding" Readiness Assessment (SFRA) on the FVS was conducted in April 1981. One of the results indicated a need to define and clarify FUE and IOC procedures.
- b. Following the SFRA, ODCSOPS coordinated an action resulting in the publication of HQDA DAMO-RQR letter 71-81-3, dated 2 November 1981. The letter provides interim guidance pending publication of the procedures in the appropriate material acquisition regulations.

TOPIC: MILESTONE IV FOR MATERIEL FIELDING DATES

RECOMMENDATION NUMBER: 61

STUDY LOCATION (VOLUME-PAGE): 6-88 to 6-91

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-HQR)

1. Purpose: To obtain Director of the Army Staff approval to adopt subject recommendation in part.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981--Pages 6-88 to 6-91.
- (2) Revised draft AR 700-127, Integrated Logistics Support.
- c. Rationale for Recommendation: The study refers to the Carlucci initiatives for the conduct of a post-deployment review and proposes the title "Milestone IV" review. This post-deployment review envisions the following three separate assessments: Fielding Assessment (How well was equipment introduced?); Readiness Assessment (How well is the system performing?); and Transition Assessment (Is the system mature enough to dissolve the PM ofc?). The post-deployment reviews should occur 1-2 years after IOC.
 - d. Analysis of Recommendations:
 - (1) Reference 2a(1) was basis for this recommendation.
- (?) Carlucci initiatives established a requirement for a Service post-deployment review.
- (3) A requirement exists for a post-deployment review to be conducted no earlier than one year, or no more than two years after IOC to provide for a detailed review of overall performance and supportability of a material system in the operational environment.

- (4) The review should be titled "Post-Deployment Assessment." "Milestone IV" should be deleted as an identifier, because this designation could become confused with the existing three designated material acquisition decision reviews. Further, Milestone IV infers a HQDA or OSD conducted review.
- (5) Study proposes that a portion of the review include a transition assessment for purposes of determining whether the system is mature enough to dissolve the PM office. The PM Charter contains provisions for such determination.
- (6) Draft revised AR 700-127 (Ref 2a(2)) contains provisions for a Post-Deployment assessment for major and designated acquisition programs.
- (a) Objective is to provide detailed review of overall performance and supportability of a material system in an operational environment.
- (b) Materiel developer will lead the assessment with participation from the combat developer, trainer, logistician, gaining MACOM and others as appropriate.
- (c) Post-deployment assessment will be accomplished 12-24 months after IOC.
 - e. Relationship to Other Studies: Relates to the Carlucci initiatives.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. ODCSLOG, ODCSRDA concur.

3. Recommendation:

- a. Do not adopt that portion of the study recommendation which would:
 - (1) Designate the Post-Deployment Review as a Milestone IV Review.
 - (2) Include dissolution of PM office in the assessment.
- b. Approve the concept for conduct of a material developer led Post-Deployment assessment with participation from the combat developer, trainer, logistician, gaining command and others.

TOPIC: PM/TSM JOINT MOU

RECOMMENDATION NUMBER: 62

STUDY LOCATION (VOLUME-PAGE): 6-162

PROPONENT OFFICE: HQDA(DAMA-PPM-A)

1. References:

- a. Study of Army Logistics 1981, Section 6, Page 162.
- b. Memorandum, DALO-PLO, 13 Oct 81, Subject: Assessment Plan, Study of Army Logistics 1981.
- c. CSM 81-700-28, 18 Nov 81, Subject: Study of Army Logistics 1981, Plan of Assessment.
- 2. Statement of Recommendation: "That HQs DARCOM and TRADOC publish a joint memorandum of understanding that clearly defines the responsibilities of the PM and TSM throughout the materiel acquisition life cycle."
- 3. Rationale for Recommendation: The study states that there is an apparent conflict or overlap in the responsibilities of the DARCOM Project Manager (PM) and the TRADOC System Manager (TSM) as described in AR 1000-1 and TRADOC's TSM-implementing documents.

4. Analysis of Recommendation:

- a. The recommendation reflects the recognized problem that there is no current DA or DARCOM regulation that defines the relationship between the PM and TSM.
- b. A special IG Inspection Team on Force Modernization has selected this recommendation for study. They have just completed their work at DARCOM and will be reporting their findings in July 1982.
- c. The preferred method of implementation is to revise DARCOM pamphlet 70-2 (DARCOM TRADOC Materiel Acquisition Handbook) based on this recommendation and the results of the Special IG Inspection. This handbook describes the working relationship between DARCOM and TRADOC.
- 5. Benefits of Implementation: The revision of DARCOM Pamphlet 70-2 will clarify the interactive roles of the PM and TSM and harmonize them with the primary acquisition regulations.

- 6. Resources Required for Implementation: DARCOM Pamphlet 70-2 revision will be accomplished by DARCOM HQ (proponent).
- 7. Method of Implementation: Revision of DARCOM Pamphlet 70-2. As a result of the Carlucci Initiatives, all principal material acquisiton regulations are under review and revision. These regulations will also be examined to ensure proper presentation of the PM TSM relationship.
- 8. Relationship to Other Studies: This recommendation is being studied by the Special IG Inspection Team on Force Modernization.
- 9. Relationship to Other Recommendations within the Study of Army Logistics None.
- 10. Coordination: ODCSOPS and DARCOM concur with this memorandum.

FUNCTIONAL AREA: Management and Organization

TOPIC: TRADOC SYSTEM MANAGER (TSM)

RECOMMENDATION NUMBERS: 63-64

STUDY LOCATION (VOLUME-PAGE): 6-162, 6-164

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQR)

- 1. Reference CSM 81-700-28, Study of Army Logistics-1981, page 38.
- 2. Statement of Recommendations: "Stabilize TSM tours; train them before they assume duties." "Revise TRADOC Regulation 71-12; make TSM Charters consistent with AR 1000-1."
- 3. Rationale for Recommendation: The study states that HQDARCOM and HQTRADOC should publish a Joint Memorandum clarifying the responsibilities of the PM and TSM; that policy be established to stabilize TSM staff tours and train TSMs prior to their assumption of duty; and that TRADOC Regulation 71-12 and TSM Charters be revised to attain consistency with AR 1000-1.
- 4. Analysis of Recommendations: Implementation of the recommendations is ongoing and will continue.
- a. In January 1982, TRADOC instituted a series of initiatives to improve the combat development process. Among these initiatives are:
- (1) The development of a self-paced training package for TSM, combat and training development officers. Action completed 29 March 1982.
- (2) The establishment of TSM, CD, and TD education programs at schools. A list of courses, quotas, and available funding was provided to TSMs, schools, and centers in February 1982. TRADOC is also investigating establishment of courses at Fort Leavenworth and use of the Defense Management College as additional means for training.
 - (3) The stabilization of TSM, CD, and TD tours. Action continuing.
- (4) The revision of TRADOC Regulation 71-12, in the near future, to incorporate changes brought about by the Carlucci and TRADOC initiatives. Currently, all TSM Charters are reviewed, approved, and signed by the TRADOC Commander.
- b. The TRADOC initiatives, both completed and in process, fulfill the intent of recommendations 63 and 64.

- 5. Benefits of Implementation: TRADOC initiatives will clarify functions between TSM and PM, improve TSM CD and TD education level, and contribute to tour stabilization.
- 6. Resources Required for Implementation: TRADOC has undertaken these initiatives within existing resources.
- 7. Relationship to Other Studies: TRADOC's initiatives were instituted as a result of the Carlucci initiatives, but have equal applicability to the Study of Army Logistics 1981.
- 8. Relationship to Other Recommendations within the Study of Army Logistics 1981: These recommendations are not influenced or paced by another recommendation within this study.
- 9. Coordination: TRADOC concurs.

TOPIC: FINANCIAL MANAGEMENT

RECOMMENDATION NUMBER: 65

STUDY LOCATION (VOLUME-PAGE): 8-32

PROPONENT OFFICE: HQDA COA (DACA-FAZ-CP)

1. Reference:

a. Study of Army Logistics - 1981, Section 8.

- b. Draft Comptroller of the Army Financial Management Plan for Emergency Conditions (COA FMPEC).
- 2. Statement of Recommendation: "Provide timely implementation of the FMPEC Provisions."
- 3. Rationale for Recommendation: The study states that financial management processes incident to acquisition of materiel in wartime will not be identical with peacetime processes and that policies and systems must be established or modified to accommodate this situation.
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. The draft ${\sf COA}$ FMPEC has been submitted to the Army Staff and MACOMs for review and comment.
- b. The status of logistical/financial system modifications required to implement COA FMPEC policy regarding the acquisition of and accounting for stock fund material during wartime is indicated below.
- (1) Standard Army Intermediate Level Supply (SAILS). Where required, necessary system modifications are being made. Requirement involves assignment of unique fund codes on MILSTRIP requisitions for stock fund material emanating from supply activities in the emergency area.
- (2) Standard Army Financial Inventory Accounting and Reporting System (STARFIARS). Required system modification will be broadcast in September 1982. Modification involves processing incoming interfund bills applicable to activities in the emergency area, assigning required financial codes, and passing these interfund bills to the Standard Finance System (STANFINS) for recordation of consumer fund obligations.
- 5. Benefits of Implementation: Publication of COA FMPEC will permit modifications to systems and procedures to allow orderly and timely transition to wartime scenario.

- 6. Resources Required for Implementation:
- a. This recommendation, i.e., publication of the COA FMPEC, is being implemented using available resources.
- b. Modifications to logistical and financial systems to implement COA FMPEC provisions are being/will be accomplished with available resources.
- 7. Method of Implementation:
- a. The COA FMPEC, when staffing is completed, will be published and distributed.
- b. Necessary policy and system changes will be initiated by responsible agencies to implement FMPEC provisions.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within the study. However, COA FMPEC provisions must be taken into consideration in determining what the peacetime financial accounting system for the future will be (Recommendation Number 66).
- 10. Coordination: ODCSLOG point of contact concurs.

TOPIC: FINANCIAL MANAGEMENT

RECOMMENDATION NUMBER: 66

STUDY LOCATION (VOLUME-PAGE): 8-32

PROPUNENT OFFICE: HQDA COA (DACA-FAL)

- 1. Reference Study of Army Logistics 1981, Section 8.
- 2. Statement of Recommendation: "Conduct Cost-Benefit Analysis to Determine Optimum Level of Financial Control of Retail and Consumer Inventories."
- 3. Rationale for Recommendation: The study states that consumer and retail level Financial Inventory Accounting (FIA), as accomplished in the US Army today, is not in accord with provisions of applicable laws and regulations, financial management systems at the retail and consumer levels provide too much/too little data, financial management processes are too costly in terms of personnel resources consumed and do not take into consideration capabilities of personnel and equipment, there are too many financial management systems in use today, and financial management processes and systems will not be identical in peace and war.
- 4. Analysis of Recommendation: Accomplishment of recommendation is ongoing and will continue.
- a. A briefing regarding financial management at the retail and consumer levels was presented to DA ODCSLOG personnel on 2 December 1981. The briefing included details regarding how the required cost benefit analysis will be accomplished.
- b. A letter containing the aforementioned briefing and a questionnaire has been dispatched to Army MACOMs. The questionnaire requires reporting of inventory values, solicits comments regarding presented FIA alternatives, allows introduction of additional alternatives, and requests designation of the preferred alternatives.
- c. Dispatch of the foregoing letter and questionnaire constitutes accomplishment of the first three milestone events in our assessment plan.
- 5. Benefits of Implementation: The end result of the cost benefit analysis will be the implementation of a retail and consumer level FIA system in the US Army that
 - a. adheres to provisions of law and regulations,
 - b. provides the capability to readily transition to war,
- c. minimizes workload impacts on the field commander, his staff, and personnel,

- 6. Resources Required for Implementation:
- a. Conduct of the cost benefit analysis is being accomplished with present resources.
- b. Resource requirements to implement the new FIA policy will vary dependent upon the alternative selected. Some proposed FIA alternatives involve modification to financial and/or logistics systems.
- 7. Method of Implementation: Dependent upon the FIA alternative selected, one or both of the following actions will be required.
- a. Modification to FIA regulations or submission of request for exception to provisions of law and regulations.
- ${\tt b.}$ Modifications to existing or provisions for new interfaces between logistical and financial systems.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: To be ascertained at the time the FIA alternative is selected.
- 10. Coordination: DCSLOG POC concurs.

TOPIC: DA SET-ASIDE

RECOMMENDATION NUMBER: 67A

STUDY LOCATION (VOLUME-PAGE): 13-78

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPP-B)

1. Reference Study of Army Logistics - 1981, Section 13, Capital Investment, page 13-78.

- 2: Statement of Recommendation: "Establish DA Set-Aside for all Capital Equipment."
- 3. Rationale for Recommendation: The study recommends the funding of all Capital investment equipment from a single source in order to promote improvement in facilities and processes.
- 4. Analysis of Recommendation: Feasibility of implementing recommendation is ongoing and will continue.
- a. Currently there are some 19 programs through which capital investment equipment can be purchased. These programs are funded by five different Army appropriations or funds.
- b. Implementation would require the rewrite of guidance/policy and OSD Congressional approval of funding sources impacting on the following appropriations: Research, Development, Test and Evaluation (RDT&E), Procurement Appropriation (PA), Military Construction, Army (MCA), Army Industrial Fund (AIF), and Operation and Maintenance, Army (OMA).
- c. Study of feasibility of this recommendation will include investigation of a lesser implementation, that is, consolidation of some of the 19 programs of Capital investment funding sources into one or two major programs.
- 5. Benefits of Implementation: Consolidation of the present 19 funding programs into a single fund or one or two fund sources will eliminate the confusion in the field regarding what fund source to use to purchase investment equipment. Therefore, implementation of the recommendation should improve the process of purchasing investment equipment to support production, maintenance and supply, construction, office support, and lab work.
- 6. Resources Required for Implementation:
 - a. This recommendation is being implemented using available resources.
- b. There is no known shortfall of resources needed to support this recommendation.

- 7. Method of Implementation: Funds are provided through appropriations which support the Army Staff.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to recommendation 67B and 67C.
- 10. Coordination: OASA(IL&FM), DARCOM, ODCSOPS, OCOA, and OASA(RDA) concur.

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 67B

STUDY LOCATION (VOLUME-PAGE): 13-78

PROPONENT OFFICE: HQDA COA (DACA-RMP)

- 1. Reference Study of Army Logistics 1981, Section 13, page 13-78.
- 2. Statement of Recommendation: "Non-Industrial Fund Expand Scope of Productivity Enhancing Capital Investment (PECI) to include RDT&E."
- 3. Rationale for Recommendation:
- a. Capital Investment resources are a major concern in the logistics area because of the increased workload requirements and the need for productivity improvements.
- b. Many investment opportunities with a resultant savings are lost because of inadequate financial resources. Accordingly, the recommendation was made to expand the scope of PECI to include RDT&E.
- 4. Analysis of Recommendation:
- a. The COA is responsible for including resource requirements for Productivity Capital Investments in the PPBS. Accordingly, the PECI program had already been expanded to include RDT&E when the recommendation was made during the study.
- b. The Army's "set aside" for capital investments consists of \$53.1 million for FY 83. This figure includes \$4 million for RDT&E.
- 5. Benefits of Implementation: An investment of \$4 million in RDT&E is expected to result in an annual savings of \$2.5 million.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: Funds will be integrated into the current formalized Capital Investment Programs managed by CCA.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: ODCSRDA, the Program Director for RDT&E, has concurred.

FUNCTIONAL AREA: Management and Organization

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 67C

STUDY LOCATION (VOLUME-PAGE): 13-78

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDP)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981--pages 13-78.
- (2) AR 310-34, Equipment Authorization and Utilization Policies and Criteria, and Common Tables of Allowances, 24 February 1975, with changes.
- (3) DA Circular 310-81-11, Base-Level Commercial Equipment, 1 October 1981.
- b. Statement of Recommendation: "Delegate technical/administrative approval to MSCs (excluding ADP and word processing)."
- c. Rationale for Recommendation: While financial approval for new equipment has been decentralized in many cases, the technical/administrative approval (authority to add to TDA) has not, thus delaying acquisition of needed equipment.
 - d. Analysis of Recommendation:
 - (1) Reference 1(a)(1) was basis for this recommendation.
 - (2) Title of reference page is "Non-Industrial Fund."
 - (3) The following facts are germane to the recommendation:
- (a) HQDA retains the authority to approve DA-controlled items (TDA Section III) except for:
- o Those requirements for certain standard items which meet the basis of issue criteria in appendix E, AR 310-34.
- o Those requirements for certain nonstandard items which meet the definition of major Army command (MACOM) approved base-level commercial equipment (BCE) (DA Circular 310-81-11).



- (b) It must be assumed that the recommendation is not referring to the above exceptions but to the body of equipment, the approval of which has not been delegated.
- (c) The recommendation addresses delegation of TDA approval authority to two levels below HQDA. If HQDA were to do this for DARCOM major subordinate commands (MSC), it would have to do it for all MACOM MSCs.
- (d) ODCSOPS conducted a survey in 1976 of delegating approval authority for HQDA controlled items to the MACOM. As a result, the list of items was reduced to the absolute minimum. For those that remained, the majority of the replies received in the above mentioned survey recommended that the HQDA control on the listed item categories be sustained. Attached is a summary of excerpts from these replies.
- (e) The allegation that "financial approval for new equipment has been decentralized in many cases" cannot be verified in discussion with HQDARCOM. The only procurement appropriation equipment for which financial approval has been delegated is the BCE discussed in 3a above, but only to the MACOM.
- (f) The recommendation excludes ADP and word processing equipment. It should be noted that there are other types of equipment as well which are approved by other means prior to inclusion in TDA; e.g., audic-visual equipment and printing/binding equipment. MACOMs develop five-year plans for their requirements and submit to HQDA for approval. TDA inclusion is an after-the-fact action.
 - (g) Relationship to Other Studies: None.
- (h) Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - (i) ODCSRDA, ODCSLOG, and OCA concur.
- 3. Recommendation: Do not adopt the study recommendation to delegate TDA approval of HQDA controlled items of equipment to the MSC.

SUMMARY OF REASONS FOR SUSTAINING HQDA-CONTROL OF CERTAIN EQUIPMENT

- 1. GENERAL. The Army has been criticized by the Congress, the OMB, the OSD, the $\overline{\text{IG}}$, and the AAA for proliferation, duplication, and lack of utilization of equipment. Reducing the HQDA-controlled equipment list would cause less HQDA supervision and control. It seems reasonable to believe that with no HQDA control there would soon be a proliferation of requests for more equipment than there presently is with HQDA control. Less supervision and control of equipment than now exists would only open the Army's procedures and policies for more criticism from those sources mentioned above. (DAMO-RQ).
- 2. STATE-OF-THE-ART IMPLICATIONS. The unique nature of many intelligence related equipment items, coupled with rapidly evolving technology, mitigates strongly for HQDA control of these items. (DAMI) Many TDA requests contain equipment that is over-engineered and costly. DA control results in reduced costs and provides for the minimum essential requirement to be met. (DAMO-OD)
- 3. TOE IMPLICATIONS. It does not appear to be in the best interests of readiness to allow TDA proponents the authority to approve RICC-1, readiness producing items, to non-TOE units/activities. (DAMO-OD) (NGB). The continued control of the FE items is considered necessary to provide a source of information for planning, programing, and general information inasmuch as many items of FE construction type equipment are also used by Engineer TOE units. (DAEN)
- 4. FUNDING IMPLICATIONS. The fact that manpower cuts have affected the ability to perform detailed review doesn't logically lessen the requirement to perform the review. In fact, the cuts seem ill-advised; with the expanded capabilities of TAADS, MTOE and TDA adjustments are becoming more frequent and extensive in their impact. Concurrently, the procurement, distribution and prod ction of more and more equipment is relying solely on the accuracy of Micro-management, not abdication of TDA stated requirement. responsibility, is required to ensure sufficient control in what promises to be a time of even tighter funding. (DAMO-FDA). Although TDA change approval authority at HQDA level may be time consuming, this review serves an important function as a management control mechanism that is currently available for The fact that only five percent of the requests since 1 January 1976 were denied is evidence that the subordinate headquarters are performing a thorough screening prior to submission to HQDA. However, this does not mean that the five percent that would have been approved at the MACOM level are insignificant. (DAMO-SS) DAEN is staffed with professionally a/o technically trained personnel who determine the manner in which FE work will be accomplished at Army installations worldwide. Review of TAADS documents and recommendations pertaining to FE equipment portions of such documents by DAEN is necessary to ensure appropriateness and conformance with FE work and missions. (DAEN)

5. STANDARDIZATION, ACQUISITION AND PROVISIONING IMPLICATIONS.

- a. Standardization of ADP systems will continue to increase in the future, first at DA levels, then at DOD. Results of standardization may permit possible change of certain manpower and equipment authorization levels which will be directed by HQDA. (DACS) Audio-visual software is produced in certain formats for local and Army-wide use. The hardware necessary to playback these products must be standardized. DA control ensures compatibility between software and equipment formats. (DAMO-OD)
- b. The dollar value of certain ADPE acquisitions is high and requires the approval of the Army Secretariat (principally ASA (FM)) prior to undertaking the acquisition. Continued control of these acquisitions by HQDA will remain in effect. Certain ADPE acquisitions often are required by more than one proponent (MACOM) and, therefore, receive HQDA direction. (DACS)
- c. The provisioning of adequate NBC defense equipment is currently one area that is receiving high level interest within HQDA, DOD, and Congress. The requirement for intensive management procedures associated with this interest will continue for several years. The mechanism of the HQDA controlled items listing will assist in achieving effective distribution of resources that are in short supply. (DAMO-SS)
- 6. LETTER REQUEST PROCEDURES AND/OR TECHNICAL REVIEW. The Letter Request technique for obtaining HQDA-controlled items is not being used by all MACOMs. Therefore, the total impact of the approval process is difficult to assess. In our opinion, to completely obviate the HQDA controlled item list and provide a carte blanche to TDA commanders will pose a "help yourself" temptation that will be hard to resist. This does not mean that commands will act irrationally or without responsibility tanks will not suddenly appear in front of flag poles at posts, camps and stations; but, rough-terrain forklifts are nice-to-have and a judicious commander can see a need. At \$29,000 per copy, even a small IIQ creep will be expensive. In any event, the Letter Requests are only the tip of the total TDA equipment iceberg, viz:

Equipment Review Activity, DARCOM, reviewed 1800 TDA requests for equipment during the last 10 months. The majority of these requests were proponent approved. Inadequate justification, incompatibility of the requested item with existing unit equipment, requests for maintenance equipment above that echelon which the unit is authorized to perform, and a lack of commodity expertise by the requestor, combined to provide examples of reasons why authority to requisition was denied. The total cost avoidance attributable to this review was \$40.4 million. An additional \$14.3 million of denied requests are still pending final ODCSLOG approval.

It would seem that more, not less, management is required. (DAMO-TDA)

7. PROPER DOCUMENTATION. In accordance with AR 108-2, audiovisual equipment is documented in the training and audiovisual support center paragraph of the installation TDA. DA control ensures that the equipment is placed in the appropriate TDA and available for utilization by all post activities. (DAMO-OD)

8. SUMMARY AND CONCLUSIONS.

- a. Recommend that HQDA continue to exercise some form of control over subject TDA equipment requirements and authorizations approval. Objective of such monitorship is to preclude unwarranted increases to equipment requirements. (DACA)
- b. The rationale for controlling equipment still seems valid. Perhaps the imposition of a HQDA control is accomplishing just what it set out to do. Because very few units are violating the intent of the constraint does not mean that they would continue to do so if the deterrent were removed. Simply put, this is the principle of a minefield; just because the enemy doesn't go through the mined area does not mean that the mines should be removed. (DAMO-FDA)
- c. From this vantage point, it seems that the system, because of its scope and magnitude, is beginning to drive the operators. Inability to cope with the demands has moved us another step closer to allowing unit equipment authorizations to operate totally outside the pale. The possibility is not remote that the next step will be to eliminate MTOEs from review. As long as the requestor incurs neither fiscal nor distributional responsibility for that which he requests, it is incumbent upon the staff to keep their finger in the dike. (DAMO-FDA)

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 68

STUDY LOCATION (VOLUME-PAGE): 13-122

PROPONENT OFFICE: HQDA ODCSLOG (DALO-RMB)

1. Reference:

- a. Study of Army Logistics 1981, Section 13, page 40.
- b. Deputy Secretary of Defense Carlucci Memorandum, 19 August 1981, subject: Financing of Equipment Purchased for Industrial Fund Activities.
- 2. Statement of Recommendation: "Expand Army Industrial Fund (AIF) thru adopting Carlucci proposal for industrial funding for capital investment."
- 3. Rationale for Recommendation: The study states that it would be a good business practice to expand AIF thru adopting the Carlucci proposal for industrial funding for capital equipment.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Army supports the initiative to enable the industrial fund activities to operate in a fashion more closely aligned to a true business-type environment and to facilitate the modernization of our industrial plants.
- b. The Army Procurement Appropriation, commencing in FY 1983, will cease buying this equipment for "free issue" for industrial fund activities.
- c. Industrial fund cash will be used to buy the equipment. These costs will be recouped in the prices charged for goods and services.
- d. The policy will be applied in maintenance, ammunition production, research and development, and port operations facilities.
- e. Equipment valued at \$225 million is expected to be ordered in FY 1983. Funds that would have purchased equipment under the old policy have been excluded from the FY 1983 Procurement Appropriation budget requests.
- f. Formal implementation will commence upon receipt of official guidance from (OSD(C).

- 5. Benefits of Implementation: A modern and responsive industrial base is critical for economical peacetime operations and to support the mobilization and sustained operations of Defense forces during wartime operations.
- 6. Resources Required for Implementation:
 - a. This recommendation will commence using available resources.
- b. If the total cash requirement cannot be generated in the manner recommended by OSD(C), it may be necessary to request additional cash from OSD(C).
- 7. Method of Implementation: A change to AR 37-110 will be used as the vehicle to implement this policy. Staff visits may be made to check on implementation.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: There is a correlation between this recommendation and #70 on the implementation of rate stabilization. One of the primary sources for the generation of cash to purchase capital equipment is the application of a uniform factor in the stabilized billing rate.
- 10. Coordination: OCOA, USAFAC, HQs DARCOM and MTMC, and OASA(IL&FM) concur.

ADDED INFORMATION - Nov 82

Para 4,e. The new FY 1983 requirement is \$152 million. As of 18 Oct 82, the HASC/SASC and SAC have approved the policy, but OSD has not provided instructions to proceed due to concern in the HAC.

FUNCTIONAL AREA: Management and Organization

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 69

STUDY LOCATION (VOLUME-PAGE): 13-88

PROPONENT OFFICE: HQDA COA (DACA-BUA)

1. Reference:

- a. Study of Army Logistics 1981, Section 13, pages 88-89.
- b. Deputy Secretary of Defense Carlucci Memorandum, 19 August 1981, subject: Financing of Equipment Purchased for Industrial Fund Activities.
- 2. Statement of Recommendation: "Establish Reserve Fund for Revenues Generated."
- 3. Rationale for Recommendation: The study states that establishment of a reserve fund for revenues generated is a final requirement for Army implementation of the Carlucci Proposal for industrial funding of capital equipment.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Army supports the recommendation to establish a reserve fund for Army Industrial Fund (AIF) revenues.
- b. Under the policy approved in reference 1b, beginning in FY 83, the Army Procurement Appropriation will cease buying for "free issue" most of the capital equipment used by AIF activities.
- c. AIF cash will now be used to purchase most AIF equipment. The cash will be generated through higher billing rates charged to AIF customers.
- d. In order to retain for equipment purchases the additional revenues generated through higher billing rates, the Army has initiated changes to AIF accounting policy and financial statements to allow for the reservation of AIF operating gains.
 - e. Formal implementation will commence on 1 October 1982.

- 5. Benefits of Implementation: AIF activities will more effectively account for the total true cost of programs/worked performed. Modernization of our industrial plants will also be facilitated.
- 6. Resources Required for Implementation: This recommendation will be implemented using available resources.
- 7. Method of Implementation: Changes to the AIF regulation, AR 37-110, are now being staffed with AIF activities. These changes implement the subject recommendation.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: There is a direct relationship between this recommendation, recommendation #68, "Expand AIF Thru Adopting Carlucci Proposal for Industrial Funding for Capital Equipment," and recommendation #70, "Implement Stabilized Rate Options." Establishment of a reserve for revenues is a final requirement for adopting the Carlucci Proposal. Revenues will primarily be generated through the application of a uniform factor in stabilized billing rates.
- 10. Coordination: DCSLOG, USAFAC, HQ DARCOM and MTMC, and OASA(IL&FM) concur.

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 70

STUDY LOCATION (VOLUME-PAGE): 13-100, 13-122

PROPONENT OFFICE: HQDA ODCSLOG (DALO-RMB)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject ${\tt recommendation}$.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, Section 13, Page 40.
- (2) ASD(C) memorandum, February 14, 1975, subject: Fixed Rates and Prices for Services Furnished by Industrially Funded Activities.
- b. Statement of Recommendation: "Implement Stabilized Rate Recommendations (two options): (a) eliminate stabilized rate, (b) revise rate application."
- c. Rationale for Recommendation: The study states that it would be a good business practice to either eliminate stabilized rates or revise stabilized rate application to make it more responsive to actual cost changes.

d. Analysis of Recommendation:

- (1) Rate stabilization was implemented in the Army Industrial Fund (AIF) during FY 1976 at the direction of the Office, Secretary of Defense.
- (2) By fixing prices to be charged for services within a given operating period, the customers of the AIF can develop their programs with reasonable confidence as to the level of financing required for program execution, thus improving customer workload planning and scheduling of operations at the industrial activity.
- (3) Prior to implementation of this policy of rate stabilization, cost increases were passed on to the customer through periodic increases in unit costs. These increases caused customers to reduce program to remain within fund availability.

- (4) Under the option "eliminate stabilized rate" recommended in the subject study, the AIF customer would lose the benefits as enumerated above. The option "revise rate application" calls for setting rates one year in advance rather than two years in advance, and adjusting cost sensitive areas at the beginning of the fiscal year. The first part of this option is consistent with current policy. AIF rates are not firmly set until approximately seven months prior to the beginning of the fiscal year. For example, FY 1983 rates should not be set finally until decisions made by the Army and OSD on the FY 1983 budget are completed in January 1982. Therefore, FY 1983 rates will be firmed up between January 1982 and March 1982. The second part of this option is not consistent with current policy as it would detract from the main purpose of rate stabilization, i.e., to stabilize the programs customers expect to accomplish by keeping prices constant.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: There is a correlation between this recommendation and #68 on the implementation of the Carlucci Memorandum on capital equipment financing. One of the primary sources for the generation of cash to purchase capital equipment is the application of a uniform factor in the stabilized billing rate.
- 3. Recommendation: Do not adopt the study recommendation to either eliminate or revise AIF stabilized rate applications.
- 4. OCOA, USAFAC, HQs DARCOM and MTMC, and OASA(IL&FM) concur.

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 71

STUDY LOCATION (VOLUME-PAGE): 13-102

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MBC)

- 1. Reference Study of Army Logistics 1981, Section 13, pages 13-102 to 13-103.
- 2. Statement of Recommendation: "Eliminate End-Strength Ceiling."
- 3. Rationale for Recommendation: The study states that the elimination of end-strength ceiling controls will enhance the management of Army resources by implementing dollar controlled/workload based manpower authorizations.
- 4. Analysis of Recommendation:
- a. The Army has been pursuing the elimination of end-strength ceilings for the past several years. Recommendations have been forwarded to OSD and testimony has been provided before various Congressional subcommittees. On 17 March 1982, the Deputy Director, Army Manpower, Programs and Budget, addressed this issue in hearings before the Subcommittee on Readiness and the Subcommittee on Military Personnel and Compensation of the House Armed Services Committee.
- b. The removal of statutory end-strength ceiling controls, with a corresponding move to a dollar resource management system to control civilian employment levels, is a goal that will continue to be pursued by the ODCSPER. However, it should be realized that this is a sensitive issue and that accomplishment is not likely in the near future.
- 5. Benefit of Implementation: N/A.
- 6. Resources Required for Implementation: N/A.
- 7. Method of Implementation: N/A.
- 8. Relationship to Other Studies: The concept to eliminate end-strength ceilings has been an ongoing ODCSPER initiative.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Recommendation 75C (Remove FMS Personnel from Current Personnel Ceilings) is a subelement of this recommendation. Recommendation 75C is being addressed separately.
- 10. Coordination: ODCSOPS and PAED concur.

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 72

STUDY LOCATION (VOLUME-PAGE): 13-102

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

- 1. Reference Study of Army Logistics 1981, Section 14, pages 48-53 and 80-89.
- 2. Statement of Recommendation: "Shorten Approval Times to Obtain Investment Funds."
- 3. Rationale for Recommendation: Allows Army to take advantage of fast pay-back investments which may be lost under normal approval procedures due to the length of time it takes to obtain appropriations.
- 4. Analysis of Recommendation:
- a. By expanding the Army Industrial Fund by adopting the Carlucci initiative for industrial funding capital equipment, the Army will shorten the acquisition leadtime for capital equipment. Implementation requires that the Army:
 - (1) Provide initial direct funding to furnish cash to AIF.
 - (2) Incorporate future inflation effect in depreciation factor.
- (3) Ensure depreciation factor is adequate to accommodate equipment purchases for workload increases.
 - (4) Establish reserve fund for revenues generated.
 - b. Types of Equipment excluded from this process are:
 - (1) Project specific equipment (e.g., support new weapon system).
 - (2) Equipment for mobilization.
- c. Industrial funding makes good business sense since it reduces administrative leadtime and reduces paperwork. Accordingly, the Army has adopted this recommendation and is in the process of adopting this recommendation under the Carlucci initiatives.
- 5. Benefits of Implementation: Implementation of this recommendation will provide reduced acquisition leadtime, reduced paperwork, better estimation of costs for facility projects, and faster pay-back of investment.

- 6. Resources Required for Implementation: This recommendation is being fully implemented within available resources. Once implemented, however, Government resources normally associated with processing equipment requests through appropriation channels should decrease since the funding process is now more efficient and decentralized.
- 7. Method of Implementation: Regulatory policy is being developed. Regulations on industrial funding will need modification.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not paced or influenced by any other recommendation. However, this recommendation is related to Number 31, "Correct Serious Decline in National Industrial Capability," in that both recommendations are geared toward improving the industrial base by incorporating actions which streamline the Army's administrative process.
- 10. Coordination: DARCOM (DRCPP-I), ODCSLOG, and OASA(RDA).

TOPIC: CAPITAL INVESTMENT

RECOMMENDATION NUMBER: 73

STUDY LOCATION (VOLUME-PAGE): 13-122

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-PPM-P)

1. Reference Study of Army Logistics - 1981, Section 13, pages 1-17.

- 2. Statement of Recommendation: "Stress Capital Investment Master Planning."
- 3. Rationale for Recommendation: The Army has nineteen different funding sources for buying capital equipment. Prior to the HQ DARCOM realignment, there was no organization for bringing together into one plan an investment strategy for an installation to improve productivity through capital equipment modernization.
- 4. Analysis of Recommendation:
- a. The Director of Manufacturing Technology, HQ DARCOM, has been given the mission of Capital Investment Master Planning. This organization will provide policy and guidance to DARCOM installations on how to structure capital investments using RDT&E, Procurement, or OMA funds in view of that installation's particular mission. The master plan will take into account the latest technology available for capital equipment and will be phased over 5, 10, and 15 year periods.
- b. The recommendation is a good one in view of the large number of ways capital equipment can be bought, and DARCOM's many, diverse missions. A DARCOM installation seeking guidance on improving productivity through capital investment will have one organization at HQ DARCOM with which to deal. By simplifying the administrative process for providing policy and guidance on capital investments, DARCOM will make it easier for installations to increase productivity and lower costs.
- 5. Benefits of Implementation: Better utilization of resources and more efficient programing for meeting assigned mission.
- 6. Resources for Implementation: This new mission is being funded at DARCOM from within existing resources.
- 7. Method of Implementation: Directorate for Manufacturing Technology is the DARCOM focal point for capital investment master planning. The draft regulation implementing the new mission is being developed. One Major Subordinate Command will be selected by DARCOM for capital investment master planning. After developing a master plan for the command, the process will be implemented at the other DARCOM installations.

- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not paced or influenced by any other recommendation.
- 10. Coordination: DARCOM (DRCMT) and OASA(RDA).

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: RESHAPE

RECOMMENDATION NUMBER: 74A

STUDY LOCATION (VOLUME-PAGE): 13-122

PROPONENT OFFICE: HQDA COA (DACA-RMP)

- 1. Reference Study of Army Logistics 1981, Section 13, Page 13-122.
- 2. Statement of Recommendation: That DA "...implement RESHAPE...Army-wide." (Profit sharing is one of the productivity improvement initiatives under the RESHAPE concept. However, because it still under test, the topic is addressed in a separate memorandum).
- 3. Rationale for Recommendation: DARCOM initiatives contained within RESHAPE (resource Self-Help Affordability Planning Effort) have demonstrated success in productivity improvement; and as such, the concept should be implemented Army-wide.
- 4. Analysis of Recommendation: Implementation of Recommendation is ongoing and will continue.
- a. The Chief of Staff has, on numerous occasions indicated his desire that MACOMs implement a RESHAPE concept.
- b. TRADOC has responded by implementing Project SPIRIT (Systematic Productivity Improvements Review in TRADOC). Full implementation is not complete; however, work is commencing toward full MACOm participation.
- $\ensuremath{\text{c.}}$ USAREUR has developed a concept plan and is proceeding to implement the concept.
 - d. Other MACOMs have inquired and received information from DARCOM.
- 5. Benefits of Implementation: The only data available at this time is from DARCOM and they have indicated a resulting benefit of 13,700 equivalent manyears of effort being provided to accomplish current workload (FY 81) requirements. DARCOM's goal is to offset approximately 99.6% of the shortfall between current baseline peacetime manpower requirements and current authorization by FY 85.

- 6. Resources Required for Implementation: Because this concept, if utilized, will offset the requirement for additional people, actual resource requirements will depend upon the nature of individual MACOM plans. Potential manpower savings can only be assessed as the MACOM implements its planned concept and evaluates the resultant data. DARCOM experience has shown, however, that the additional resources required to implement such a concept will be small with respect to the potential manpower savings to be derived.
- 7. Method of Implementation: Each MACOm will develop a time-phase plan of action reflecting their tailored approach.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Due to the nature of this recommendation, its implementation has the potential to promote and support Capital Investment Programs.
- 10. Coordination: ODCSPER, ODCSLOG, ODCSRDA, ODCSOPS, and DARCOM concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: PROFIT SHARING

RECOMMENDATION NUMBER: 74B

STUDY LOCATION (VOLUME-PAGE): 13-122

PROPONENT OFFICE: HQDA COA (DACA-RMP)

- 1. Reference Study of Army Logistics 1981, Section 13, page 13-122.
- 2. Statement of Recommendation: That DA "...implement...profit sharing Army-wide." (Title was changed to "Productivity Gain Sharing in August of 1981). Profit sharing originated as a productivity improvement initiative under the RESHAPE concept. RESHAPE at large is addressed in a separate memorandum.
- 3. Rationale for Recommendation: Initial tests conducted by DARCOM indicated the initiative as having potential for productivity improvement and as such, may be worthy of consideration for Army-wide application.
- 4. Status of Analysis of Recommendation:
- a. DARCOM is currently conducting tests at nine sites with over 1,000 employees involved. The majority of the test sites are contained within the Λ rmy industrial base.
- b. The projected completion date of the DARCOM tests is 30 September 1983. An assessment of the tests can be made by March 1984.
- c. No preliminary finding can be made at this time. Assessment can only be made at the completion of testing.
- 5. Relationship to Other Studies: None.
- 6. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 7. Coordination: ODCSPER, ODCSLOG, ODCSRDA, ODCSOPS, and DARCOM.

TOPIC: FMS PERSONNEL

RECOMMENDATION NUMBER: 75C

STUDY LOCATION (VOLUME-PAGE): 14-338

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MBC)

- 1. Reference Study of Army Logistics 1981, Section 14, pages 14-305 to 14-312.
- 2. Statement of Recommendation: "Remove FMS personnel from current personnel ceilings."
- 3. Rationale for Recommendation: During the past several years, the Army has been concerned that the manpower requirements for the Foreign Military Sales (FMS) Program have reduced the Army's ability to meet documented workload requirements. Since all FMS personnel costs are fully reimbursed from foreign funds (not US appropriated funds), the rationale exists that the FMS program should be able to obtain the manpower it needs for proper management and for which it can pay exclusive of any predetermined ceiling.
- 4. Analysis of Recommendation: Recommendation was already an ongoing ODCSPER project.
- a. During the past several years, the Army has been concerned that the manpower requirements of the FMS program have had an adverse impact on the Army's ability to meet other in-house requirements due to imposed manpower ceilings.
- b. Previous attempts, both tri-service and Army, to seek relief from the end-strength ceiling for the FMS effort have not been successful.
- c. Taskings from the 1980 Commanders' Conference included one for the Army to lead a renewed tri-service initiative to seek end strength relief for the FMS effort.
- d. The Air Force and Mavy were asked to join the Army initiative. The Air Force did not support the effort on the basis that it prefers the elimination of all personnel ceilings and not any selected categories. The Navy supports the concept; however, it prefers to pursue the issue on an unilateral basis.
- e. The House and Senate Conference Report, in connection with H.R. 4995 ("making appropriations for the Department of Defense for the fiscal year ending September 30, 1982, and for other purposes"), stated personnel who spend 50 percent or more of their time on FMS functions, for which DOD is reimbursed by a foreign customer, should be excluded from ceiling control.

- f. On 4 February 1982, the Army requested OSD(MRA&L) support in excluding from personnel ceilings those personnel who s; end more than 50 percent of their time performing FMS functions for which DC) is reimbursed by a foreign country. In addition, we conveyed our preference that the Army wants to exempt from ceiling all effort associated with the FMS function. On 24 February, OSD turned down our request.
- g. The removal of civilians who support the FMS function from endstrength ceilings is an issue that ODCSPER has pursued for several years. We will continue to pursue this issue, although it should be realized that a near term resolution is not likely.
- 5. Benefits of Implementation: N/A.
- 6. Resources Required for Implementation: N/A.
- 7. Method of Implementation: N/A.
- 8. Relationship to Other Studies: The concept to remove FMS personnel from end strength ceiling has been an ongoing ODCSPER initiative.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is a segment of Recommendation 71: Eliminate End Strength Ceiling, Section 13, pages 102-103. Recommendation 71 is being addressed separately.
- 10. Coordination: ODCSOPS and ODCSLOG concur.

TOPIC: SSA CASE MANAGEMENT

RECOMMENDATION NUMBER: 75D

STUDY LOCATION (VOLUME-PAGE): 14-338

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SAA)

- 1. Reference Study of Army Logistics 1981, Section 14, pages 314-318.
- 2. Statement of Recommendation: "Perform SSA Case Management on an item and dollar basis."
- 3. Rationale for Recommendation: The study notes that supply support arrangements have been managed since 1976 only on a dollar basis. This has led to a mismatch of assets against requirements, US and foreign customers competing for some of the same items, and an inability to identify customer equity.
- 4. Analysis of Recommendation: Implementation is underway with an expected completion date of end May early June 1982.
- a. Supply Support Arrangements, more specifically Cooperative Logistics Supply Support Arrangements (CLSSA's), are a method of providing follow-on supply support to Foreign Military Sales (FMS) customers who have purchased US military equipment, on an equal basis with US Army units.
- b. In the past, CLSSA case management was accomplished only through financial management procedures, i.e., dollar limitations.
- c. DARCOM is in the process of implementing the CLSSA Visibility and Management File as a subprogram of their Commodity Command Standard System (CCSS) and Centralized Integrated System for International Logistics (CIS-IL). This will enable each commodity command to record each country's requirements by NSN, thus allowing management on individual NSN basis. This in turn could be used to enhance supply management.
- 5. Benefits of Implementation: Case management on both an item and dollar basis will permit the Army to more closely match assets to requirements, reduce US Force/FMS customer competition for critical items and permit identification of customer equity.
- 6. Resources Required for Implementation: This recommendation is being implemented using available resources.

- 7. Method of Implementation: Program change to the Commodity Command Standard System (CCSS) and CIS-IL for Defense Logistics Agency, General Services Administration, and other Military Departments.
- 8. Relationship to Other Studies: This shortcoming in CLSSA management has been known for several years; this led to development of the CLSSA Management and Visibility File.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation does not influence and is not influenced by any other recommendation in this study.
- 10. Coordination: ODCSOPS, ODCSRDA, Comptroller, and USASAC concur.

FUNCTIONAL AREA: Acquisition and Materiel Management

TOPIC: REPORTS OF DISCREPANCY (ROD)

RECOMMENDATION NUMBER: 75E

STUDY LOCATION (VOLUME-PAGE): 14-338

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SAA)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981--Pages 320-325.
- (2) USASAC, FMS ROD Study, November 1980.
- b. Statement of Recommendation: Increase dollar threshold for ROD's processing from \$100 to \$300.
- c. Rationale for Recommendation: Foreign Military Sales Reports of Discrepancy (ROD's) are now processed in all cases when greater than \$100. While 15 percent of all ROD's are under \$100, 44 percent are under \$300. Automatic adjustment of all ROD's less than \$300 would reduce workload by 29 percent.

d. Analysis of Recommendation:

- (1) At the direction of HQDA (DALO-SAA), the US Army Security Assistance Center (USASAC) completed reference 2a(2). This included an analysis of all FMS ROD's processed between 1 October 1978 and 31 March 1980. The study recommended that authorization be granted to automatically credit all FMS logistical ROD's of \$650 or less. The \$650 figure was determined to be the point at which the cost to investigate became less than the value of the ROD.
- (2) At a June 1981 meeting with DCSLOG and Comptroller representatives, USASAC was tasked to provide additional information regarding the ability/willingness of Army Stock Fund and Procurement Secondary Item Program Managers to fund portions of the ROD's under \$650. Investigation was also warranted for DLA/GSA support of the recommendation and the impact upon the FMS Administrative Fee budget. A response has not yet been received from USASAC who continues to address these issues.

- (3) Implementation of this recommendation will require approval by the Director, Defense Security Assistance Agency.
- e. Relationship to Other Studies: A similar recommendation, with a different dollar ceiling, was included in reference 2a(2).
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. ODCSOPS, ODCSRDA, and USASAC concur.

3. Recommendation:

- a. Do not adopt recommendation 75E to establish a ROD's processing dollar threshold of \$300.
 - b. Continue the actions begun as a result of reference 2a(2).
- c. Pending results of above actions, defer decision on whether threshold should be raised to \$300, \$650, or some other figure.

TOPIC: ARMY STOCK FUND

RECOMMENDATION NUMBER: 76

STUDY LOCATION (VOLUME-PAGE): 14-414 thru 14-421

PROPONENT OFFICE: HQDA COA (DACA-BUA)

- 1. Reference Study of Army Logistics-1981, Section 14, Page 414-421.
- 2. Statement of Recommendation: "That OSD implement procedures to monitor and correct stock fund cash balances to preclude an Army deficit drain and a DLA surplus."
- 3. Rationale for Recommendation: The study reveals that an Army stock fund cash drain will occur during transfer of consumable items to DLA, since the Army must fund for a pipeline up until the day of transfer.
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. A full pipeline of consumable items must be transferred to DLA on the OSD directed realignment. There will be an Army stock fund cash drain on the consumable items realigned to DLA. After the transfer, DLA, the new source of supply, will receive reimbursements generated by subsequent customer requisitioning. In other words, DLA will be reimbursed by the customers requisitioning consumable items issued free to DLA by the Army on the OSD directed realignment.
- b. This will in turn create an Army stock fund cash impact. The Army is not being reimbursed for the consumable items purchased with Army stock fund cash.
- 5. Benefits of Implementation: The Army stock fund cash requirement will not fall below the standard of 15 days of average daily disbursements. There will be sufficient Army stock fund cash on hand to meet the day-to-day operations of the fund.
- 6. Resources Required for Implementation: This recommendation is being implemented using available resources within the Army.
- 7. Method of Implementation: HQ DARCOM provided inventory stratification data for FY 1982 and FY 1983 by their major subordinate commands covering the consumable items to be realigned to DLA in the Army stock fund mid-year FY 1982 and FY 1983 initial apportionment budget requests. The cash impact for both fiscal years was highlighted in the budget submissions. These budgets were reviewed by the DA staff on 18-20 May 1982. After DA provides HQ DARCOM

a mark on the budgets during the week of 24-28 May 1982, revised budgets will be prepared and provided DA for transmittal to OSD by 10 June 1982. A memorandum will accompany the budgets to OSD outlining the inventory stratification data and the cash impact in FY 1982 and Fy 1983 on the DLA realignment. Included in the memorandum will be a request for OSD to transfer the necessary cash from DLA to keep the Army stock fund account solvent.

- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics--1981: None.
- 10. Coordination: HQ DARCOM, ODCSLOG and ASA(IL&FM) concur.

TOPIC: CONSUMABLES MANAGEMENT

RECOMMENDATION NUMBERS: 77, 77A - 77F, 77H

STUDY LOCATION (VOLUME-PAGE): 14-516

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- Reference Study of Army Logistics 1981, Section 14, pages 340-519.
- 2. Statement of Recommendation: "If centralized management of consumables by DLA is to be effective, OSD should strongly consider these recommendations:
 - a. Recognize and compensate for workload differences.
- b. Recognize differences in Economic Order Quantity (EOQ) and Non-EOQ items and compensate accordingly.
 - c. Incorporate weapons program data into DLA systems.
 - d. Incorporate end item application data into DLA systems.
 - e. Establish new liaison channels for weapons/ILS management.
- f. Incorporate DLA representation into service force modernization efforts.
- h. Increase DLA involvement in management of design unstable parts and the provisioning process."
- 3. Rationale for Recommendation: Since the early 1970's, the Army and the other services have fought the further consolidation of consumable item management by DLA. We have felt that due to unique service requirements, the current consumables managed by the Army are best managed by the Army. Specifically:
- a. The majority of the Army managed consumables are more costly, less demanded or design controlled and driven items which require more intensive management than that given to items by DLA.
- b. DLA currently experiences higher stock availability on their items because they were funded at a 5 percent higher level than Army.
- c. DLA manages items, not weapons systems; they have no knowledge of increases or decreases in fielded densities and are not as responsive to these types of changes in their procurement and requirements determination processes.

- d. DLA does not know what end item is being affected by lack of a part. A weapons system manager is in a position to take corrective action.
- e. DLA was not set up to respond to weapons system manager initiatives to solve deadlining equipment problems and new equipment fielding requirements.
- f. While DLA receives and processes supply support requests, they basically procure on demand. They will not be as responsive in light of the number of new systems we will be fielding over the next five years.
- g. DLA's thrust is towards standardization of parts. Unique service requirements and design requirement which are dictated by higher assembly or end item design will, therefore, receive reduced attention.
- h. Army continues to oppose further transfers but we are working with DLA on a routine basis to improve their management techniques to reduce the impact we feel the current transfer and future transfers will have on readiness.

4. Analysis of Recommendation:

- a. OSD has already decided to transfer 200,000 consumable items from the Services to DLA. Army's share is approximately 35,000 items.
- b. A Joint Implementation Group (JIG) was chartered by OSD to implement this transfer. Army is represented on this group and its sub-groups.
 - c. This test will determine whether further transfers should be made.
- d. All recommendations have been presented to the JIG and other forums but approval or acceptance is dependent on OSD.
 - e. OSD has failed to recognize recommendations a and b.
- f. Joint Implementation Group efforts and DLA initiative have achieved improvements in the area of recommendations c, d, e, f, and h.
- 5. Benefits of Implementation: Any and all efforts in these areas should improve DLA support to the Army, and hopefully lessen any adverse affects on Army readiness resulting from further consolidation of consumable management at DLA.

6. Resources Required for Implementation:

a. This has been an area of much contention throughout this issue. The Army does not feel that all costs/resources are being measured in the current test, and OSD has refused to consider capturing additional costs/resources. DARCOM is attempting to capture all associated costs/resources resulting from the current test.

- b. The Army has refuted the Defense Audit Service (DAS) figures as far as personnel associated with consumable item management, but OSD has continued to support them. Accordingly, OSD identified 408 spaces in the FY 82 budget and Army stands to lose 2765 should OSD decide to transfer all consumables to DLA.
- c. The Army rebutted the loss of 408 spaces in FY 82 and OSD restored them to Army in FY 83 but not in 82 or 84-87. DCSPER has restored the 408 logistics spaces for the out years.
- d. The Army will continue to fight to retain the spaces within Army, should further transfers be directed.
- 7. Method of Implementation: Current efforts are being directed through the sub-committees of the DOD Joint Implementation Group and the budgetary process. The Assistant Secretary of the Army (IL&FM), as well as representatives from the Joint Chiefs of Staff, have been, and continue to be, represented on the Joint Implementation Group.
- 8. Relationship to Other Studies: Innumerable studies have been conducted over the past thirty years on consolidation of management of items, and most have been implemented. Elimination of duplication of item management was achieved in the early 1970s. Despite this, OSD continues to push for a single supply service over the Services' objections.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: DARCOM, ODCSRDA, ODCSOPS, and ASA(IL&FM) concur.

TOPIC: DLA PARTICIPATION IN MOB/EMER PLANNING

RECOMMENDATION NUMBER: 77G

STUDY LOCATION (VOLUME-PAGE): 14-516

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLM)

- 1. Reference Study of Army Logistics 1981, section 14.
- 2. Statement of Recommendation: "Increase DLA participation in mobilization and emergency planning."
- 3. Rationale for Recommendation: The study states that DLA participation in mobilization and emergency planning would significantly increase the capability of the Army to deploy and sustain forces.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Office of the Assistant Director, Plans, Policies and Programs, Defense Logistics Agency, has implemented a model to determine DLA asset position and service requirements during mobilization. This effort has been hampered by the inability of the services to provide detailed mobilization material requirements by national stock number. DLA is now using wartime workload factors from the Department of Defense Material Distribution Lystem Study (DODMDSS) to estimate services' requirements.
- b. The Mobilization and Reserve Affairs Office is monitoring two HQDA projects, Initial Freplanned Supply Support (IPSS), and the Mobilization Base Requirements Model (MOBREM), that will result in national stock number listings of mobilization material requirements in support of OPLANS and the mobilization base. DLA will be provided appropriate data upon validation of systems' outputs.
- 5. Benefits of Implementation: DLA participation in US Army mobilization and emergency planning will result in a better supported force during mobilization and deployment. Identification of asset shortfall at DLA will provide planners with information for development of future program objectives.
- 6. Resources Required for Implementation:
- a. DLA is implementing this recommendation using existing resources. DLA will use output from IPSS and MOBREM to replace figures developed using wartime workload factors.
- b. Army is implementing this recommendation using resources currently committed to developing mobilization requirements through IPSS and MOBREM.

- c. There is no shortfall of resources necessary to support implementation of this recommendation at the current level.
- 7. Method of Implementation: Mobilization and Reserve Affairs Office will monitor development of requirements data through IPSS and MOBREM. Data will be provided to Defense Logistics Agency at the earliest opportunity.
- 8. Relationship to Other Studies: This recommendation is not related to any other known study.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by other recommendations within this study.
- 10. Coordination: DLA, GSA, DARCOM, and the ALA Functional Area point of contact concur.

TOPIC: NBC FDTE

RECOMMENDATION NUMBER: 78

STUDY LOCATION (VOLUME-PAGE): 15-50

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-NCC)

- 1. Reference Study of Army Logistics 1981, section 15, pages 47-50.
- 2. Statement of Recommendation: "Fully fund FDTE scheduled FY 83 for evaluation of combined arms operation to include combat service support concepts and doctrine in an NBC environment, at least a brigade size force, to test basic logistics concepts (\$10M)."
- The purpose of the FDTE is to provide 3. Rationale for Recommendation: empirical data to support combat and materiel developments for the integrated The FDTE is required to measure the interaction and battlefield. interdependence of force structure, doctrine, and materiel in a sustained, severe environment representative of the threat. This need is documented in the May 1980 Chemical System Program Review (SPR) and the resulting Army Chemical Action Plan (ACAP) which was approved by the CSA on 16 July 1981. In addition, the 1979 and 1980 Army Commanders' Conferences recognized the need for realistic field testing and experimentation to validate and verify doctrinal concepts and to measure the collective impact on individual degradation on mission performance of units and teams. The CSA 1980 White Paper calls for aggressive definition of doctrine for the integrated battlefield. The final report of the Defense Science Board Summer Study on Chemical Warfare also documents the requirements for a NBC FDTE.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing: cost estimated at \$6.408M.
- a. FY 82: Chemical School, with contractor support, is preparing Independent Evaluation Plan (IEP).
- b. FY 83: Squad/Platoon level and Company/Battalion level testing conducted.
 - c. FY 84: Battalion/Brigade testing conducted.
- 5. Benefits of Implementation: Close monitoring places the Army Staff, TRADOC, and the Chemical School in a position to best influence current and future doctrinal and force structure actions.

- 6. Resources Required for Implementation:
- a. This recommendation is being fully implemented using available resources and authorized funding.
 - b. There is no shortfall of resources needed to support operations.
- 7. Method of Implementation: TRADOC will administer the test through established offices. Funds are provided through appropriations which support TRADOC.
- 8. Relationship to Other Studies: As stated in paragraph 3, other studies have recognized the need for the FDTE. Furthermore, the doctrine and materiel requirements developed in the FDTE will be the basis of future Chemical Warfare and NBC Defense scenarios.
- 9. Relationship of Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study. However, because of the nature of this recommendation, its implementation is key to the success of other recommendations which concern the management of Chemical Warfare and NBC Defense.
- 10. Coordination: ODCSRDA, TRADOC, and the Chemical School.

TOPIC: NBC VULNERABILITY

RECOMMENDATION NUMBER: 79

STUDY LOCATION (VOLUME-PAGE): 15-50

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-NCC)

1. Reference Study of Army Logistics - 1981, section 15, pages 47-50.

- 2. Statement of Recommendation: "Update NBC Vulnerability of CSS units."
- 3. Rationale for Recommendation: While a great deal of effort has been expended in determining the effects of nuclear, biological, and chemical weapons on combat units, less has been done to evaluate their impact on combat service support (CSS) units.
- 4. Analysis of Recommendation:
- a. The most recent analysis of CSS units' vulnerability to NBC was the "Logistics System Survivability in a CW Environment" study, completed in October 1980. This study was conducted to determine the vulnerability of the logistics system in Europe to CW attack and to devise methods to ensure survivability and sustained operational effectiveness. The Logistics Center and the Chemical School are currently working to implement many of the recommendations.
- b. The problems facing CSS units on the integrated battlefield are addressed in the Army Chemical Action Plan (ACAP, 16 June 1981). The ACAP tasks DARCOM and TRADOC to expand upon the work done in the Logistics Survivability Study by determining:
 - (1) Logistical support requirements for CW operations.
 - (2) Procedures for handling patients in a CW environment.
- (3) Unit-level response to casualties resulting from CW agents and use of CW agent antidotes.
- 5. Benefits of Implementation: Additional study of the problems faced by CSS units in an NBC environment will provide information required for development of doctrine, force structure, and equipment requirements.
- 6. Resources Required for Implementation: Studies will be conducted using in-house analysis resources and contract support, where required.

- 7. Method of Implementation: The necessary studies are directed by the ACAP which is managed by ODCSOPS.
- 8. Relationship to Other Studies: The successful completion of studies on the vulnerability of CSS units is dependent to a great degree upon development of realistic integrate; warfare scenarios.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: TRADOC.

FUNCTIONAL AREA: Doctrine

TOPIC: INTEGRATED BATTLEFIELD

RECOMMENDATION NUMBER: 80

STUDY LOCATION (VOLUME-PAGE): 15-50

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- 1. Reference Study of Army Logistics 1981, Section 15, page 15 -49 and 15 50.
- 2. Statement of Recommendation: "Continue evaluation of Air Land Battlefield under Combat Service Support Mission Area Analysis Program."
- 3. Rationale for Recommendation: The study recommends that the TRADOC Mission Area Analysis Panel for CSS continue to evaluate the logistic support of the Air Land Battlefield to insure that the support doctrine keeps pace with the combat doctrine.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue. The effort was initiated within TRADOC.
- a. The TRADOC Combat Service Support Panel, Mission Area Analysis, is comprised of representatives from the following service schools and agencies:
 - (1) Quartermaster School
 - (2) Ordnance School
 - (3) Transportation School
 - (4) Missiles and Munitions School
 - (5) Soldier Support Center
 - (6) Academy of Health Science
 - (7) Military Police School
 - (8) Logistics Center
- b. The CSS MAA Panel continues its study effort to produce new solutions to logistic problems in the Air Land Battlefield environment of the period 1987 forward. Specific areas of study are:
 - (1) Supply
 - (2) Services
 - (3) Maintenance
 - (4) Transportation
 - (5) Missiles and Munitions

- (6) Personnel and Administration
- (7) Medical
- (8) Combat Service Support Security
- (9) Command and Control
- c. The TRADOC CSS MAA Level II Study Effort is expected to be completed in December 1982.
- 5. Benefits of Implementation: The study results will influence the future force structure and composition of combat service support units to tailor them to provide the most effective support to the Army as it is committed to the Airland Battlefield environment of the future.
- 6. Resources Required for Implementation: No additional resources are required. The study is using the resources of the TRADOC agencies.
- 7. Method of Implementation: The study is an ongoing action using funds currently appropriated to TRADOC.
- 8. Relationship to Other Studies: This study effort is related to the Airland Battle 2000 Study, Combat to Support Balance Study, and Army Logistics Assessment.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: The evaluation of logistic support in the Airland Battlefield environment is closely associated with and influenced by almost every other Logistics Study 81 recommendation that involves combat service support in the EPA years.
- 10. Coordination: TRADOC and the Army Logistics Assessment Office concur.

TOPIC: MANAGEMENT INFORMATION NETWORK (MINET)

RECOMMENDATION NUMBER: 84

STUDY LOCATION (VOLUME-PAGE): 16-103

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-C4T)

1. Reference:

- a. Study of Army Logistics 1981, section 16, pages 99-102.
- b. JCS Memorandum, SM-204-81, 24 March 1981, subject: USEUCOM Movements Information Network Testbed.
- 2. Statement of Recommendation: "Fund MINET."
- 3. Rationale for Recommendation: The study states that the ability of the Corps MCCs in Europe to transition to war is in doubt because of peacetime problems, one of which is lack of adequate communications to support the location of units, and the coordination, delivery, and diversion of incoming cargo.
- 4. Analysis of Recommendation: Consideration of recommendation is ongoing and will continue.
- a. MINET is an approved joint action program (ref 1b) to establish a packet switching communications network testbed in Europe to support traffic management and movements of assets and cargo. Development is scheduled in four phases, spanning FY 81 thru FY 84.
- b. Phases 1 and 2 (FY 81/82) are funded by CINC initiative and DCA resources. Phases 3 and 4 (FY 83 and FY 84) require service funding of \$1.1M and \$1.2M respectively, plus \$0.9M each year for USEUCOM.
- c. Phases 3 and 4 were unfunded in FY 83 and FY 84 by all services. However, by PBD action, the services TOAs were increased to fund MINET in FY 83, and it is not included in the FY 83 budget. FY 84 requirement probably will need to be addressed in the FY 84-88 POM.
- 5. Resources Required for Implementation: (See para 4b above).
- 6. Method of Implementation: Contractual effort, through DCA.
- 7. Coordination: DAMA-CSC.

FUNCTIONAL AREA: Training

TOPIC: ALOC

RECOMMENDATION NUMBER: 85

STUDY LOCATION (VOLUME-PAGE): 16-103

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLO)

- 1. Reference Study of Army Logistics 1981, Section 16, Pages 84-107.
- 2. Statement of Recommendation: "That ALOC resupply be included in future exercises."
- 3. Rationale for Recommendation: The study states that sustainability and the projection of combat power require a supporting supply line. ALOC is a key element in that supply line and, therefore, should be tested in future exercises.
- 4. Analysis of Recommendation: Implementation of Recommendation is ongoing and will continue.
- a. ALOC is exercised daily to support deployed forces in Europe, Korea, Alaska, and Hawaii. It enables units to receive Class IX and other high priority items by utilizing the same support concept that would be used during wartime. Thus, units stationed in these areas are familiar with ALOC and are more likely to use it during exercises. Units in CONUS, however, are not daily customers and usually have insufficient time during exercises to create a demand for ALOC support items.
- b. Because ALOC is demand supported, it is a difficult concept to realistically implement during exercises. ALOC relies on units participating in the exercise to create a demand for Class IX and other critical items to activate the system. However, units are unable to create this demand because of the short duration of exercises. For example, although REFORGER lasts for over thirty days, units often take sufficient supplies and repair parts to sustain operations until they return to CONUS. Consequently, ALOC receives minimum play, except for routine support to normal ALOC customers.
- aDP and requisitioning procedures of ALOC. The Logistics Certer used this concept to evaluate ALOC during LOGEX 81. Plans are now being made to evaluate ALOC again during LOGEX 82. DARCOM is also coordinating with the 1st COSCOM at Fort Bragg to include ALOC during the conduct of Exercise Gallant Eagle, which is scheduled for March-April 82. Units participating in the exercise will be supported from the same Area Oriented Depot (AOD) that would provide ALOC support during real-world contingencies, which adds to the realism of the play. Similar arrangements can be made for testing ALOC in ther exercises.



- 5. Benefits of Implementation: The inclusion of ALOC during exercises provides Army planners and MACOM's an opportunity to evaluate ADP and requisitioning aspects of ALOC during simulated wartime conditions.
- 6. Resources Required for Implementation: This recommendation can be accomplished using available resources.
- 7. Method of Implementation: Exercise planners can introduce recommendation during initial phase of exercise planning.
- 8. Relationship to Other Studies: NA.
- 9. Relationship to Other Recommendations within Study of Army Logistics 1981: NA.
- 10. Coordination: ODCSOPS, DARCOM, Logistics Center, and the ALA Functional Area point of contact for ALOC concur.

FUNCTIONAL AREA: Doctrine

TOPIC: CONSUMER SUPPLY

RECOMMENDATION NUMBER: 87

STUDY LOCATION (VOLUME-PAGE): 16-103

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference:

- a. Study of Army Logistics 1981, Section 16, page 16-103.
- b. The Phase II Study, Logistics Operations in the COMMZ, June 1978.
- c. TRADOC PAM 525-12, Operational Concepts for the COMMZ, Logistics Operations, 30 July 1981.
 - d. USAREUR DSS/ALOC IPR, 9 Dec 81, ODCSLOG USAREUR.
- 2. Statement of Recommendation: "That Army Staff take (action to) develop doctrine for in-theater distribution of arriving ALOC stocks to include: Identification of unit locations and use of first destination reporting points."
- 3. Rationale for Recommendation: The study concludes that location of supply support activities on the battlefield is a matter of concern and that unit locations must be verified to ensure delivery.
- 4. Analysis of Recommendation:
- a. Doctrinal concepts for ALOC in wartime are outlined in references $\ensuremath{\mathtt{b}}$ and $\ensuremath{\mathtt{c}}.$
- b. Procedures are required to ensure delivery of supplies is possible on the battlefield.
- c. This requirement exists for the ALOC system, in-theater supply sources, and is a very basic requirement for any wartime supply system.
- d. Peacetime supply distribution procedures call for in-the-clear unit addresses in the DOD Activity Address Directory (DODAAD) and in the case of DSS/ALOC shipments are keyed to an in-theater distribution plan.

- e. The study correctly points out that unit locations will be difficult to update in wartime.
- f. Recognizing this difficulty, USAREUR has developed a proposed solution which was briefed during reference d by the 4th Transportation Command.
- g. The USAREUR solution calls for the establishment of distribution zones keyed to FRG Territorial Defense Zones. This system greatly simplifies ALOC delivery in wartime since only the distribution plan need be updated when a supply support activity (i.e., DSU/GSU) moves.
- h. USAREUR plans to establish a Designated Drop Point which acts as a first destination reporting point within each zone.
- i. USAREUR is taking action to establish zones and include the Distribution Zone concept in OPLANS and to define duties/responsibilities of Designated Drop Points within Distribution Zones.
- 5. Benefits of Implementation: Completion of USAREUR's development of wartime supply distribution procedures will enhance resupply and have possible application in other OPLANs.
- 6. Resources Required for Implementation:
- a. USAREUR has not yet identified additional resources tied to the Distribution Zone concept.
- b. The operation of Distribution Zone facilities may require resources upon completion of USAREUR's examination of this concept.
- 7. Method of Implementation:
 - a. USAREUR continue efforts to implement Distribution Zone concept.
 - b. DA examine opportunity to use concept in support of other OPLANs.
- 8. Relationship to Other Studies: J4 Report: European APOD Reception Study, App A, Rapid Reinforcement of NATO.
- 9. Relationship to Other Recommendations within Study of Army Logistics -1981: NA.
- 10. Coordination: USAREUR, DARCOM, TRADOC, and Functional Area Point of Contact for Inventory Control concur.

FUNCTIONAL AREA: Doctrine

TOPIC: CORPS MCCs

RECOMMENDATION NUMBER: 88

STUDY LOCATION (VOLUME-PAGE): 16-100

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSM)

1. Reference:

a. Study of Army Logistics - 1981, Section 16, page 99-100.

- b. Briefing presented by COL Sanchez, DCD, USATSCH, 1 Apr 82 to BG Toner, DTRETS.
- 2. Statement of Recommendation: "That the Corps Movement Control Centers be assigned peacetime missions in the Corps consistent with wartime missions."
- 3. Rationale for Recommendation: The ability of the Corps Movement Control Centers (MCC) to effectively transition to war is doubtful because their peacetime organization and missions are not consistent with their wartime responsibilities. The viability of movements control in the Corps is critical to the conduct of war, since the greatest number of unprogrammed moves occur in the Corps area forward. This has the potential to manifest itself with chaotic results as highway networks become clogged with unprogrammed and tactical movements. The Corps Commander must have positive control over these movements.
- 4. Analysis of Recommendation: The Commander, USA Transportation Center and Ft Eustis visited DCSLOG, USAREUR 4-7 Apr 82. During this visit he presented to the DCSLOG and Commander, 4th TRANSCOM, an analysis of USAREUR's current movement control structure as it relates to doctrinal organization. He also provided recommendations which are designed to enhance the transition of movement control units from peace to war.
- a. The analysis, rather than concentrating on a single segment of European movement control, e.g., Corps MCC's, examined the entire system, from Theater to Division.
- b. Exercises do afford the Corps' MCC some opportunity to perform their wartime mission. However, the staffs of the Corps Transportation Movement Offices (TMO's) which handle day-to-day commitments of the corps organic transportation battalion are limited.

- c. This results is by-passing the Corps MCC by division and theater. The concomitant effect is the lack of development of Corps movement control systems, hardware, and expertise needed to transition to war. The most critical of these is the sophistication of a communication net between Division, Corps, and Echelons-Above-Corps (EAC).
- d. The recommendation presented to the DCSLOG, USAREUR, for his consideration and action are:
- (1) Corps and Theater level TMO's be augmented by existing TDA organizations.
- (2) Selected Community Installation Transportation Office's (ITO's) be converted to functionally operational Corps and Theater TMO's.
- (3) Functionally integrate Division Transportation Offices (DTO's) and Corp's MCC with Theater MCC's through ADP as well as other communication links.
- 5. Benefits of Implementation: The recommendations represent a significant departure from the current methods of doing business in Europe. The current system will not efficiently support the transition to war. Therefore favorable consideration and implementation by Commander USAREUR will facilitate the European wartime movements management mission.
- 6. Resources Required for Implementation: Reference 1b above states that implementation can be accomplished through conversion of selected TDA organizations into TOE units. Community ITO conversion to TMO structure would be the basis for this proposed reorganization. The change from current structure to a more doctrinally supportable one can be phased to prevent wholesale disruption of existing administrative movements accomplished by TDA organizations. The authority for this reorientation is assigned to the Commander, USAREUR.
- 7. Method of Implementation: The USATSCH provided the recommendations to the USAREUR, DCSLOG 6 Apr 82. Implementation is a USAREUR prerogative based upon its mission and the Commander's priorities. DCSLOG, USAREUR, has taken the recommendations under consideration.
- 8. Relationship With Other Studies: This issue should interface with the planned Defense Audit Service (DAS) study of the adequacy of the European transportation and mobility system.

- 9. Relationship to Other Recommendations Within The Study of Army Logistics -1981. This recommendation is not influenced by the implementation of any other recommendations.
- 10. Coordination: ODCSOPS, USATSCH.

TOPIC: MAINTENANCE WORKLOAD AND GUIDANCE

RECOMMENDATION NUMBERS: 89A and 89B

STUDY LOCATION (VOLUME-PAGE): 17-147 through 17-167

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

1. Reference:

- a. Study of Army Logistics 1981, Section 17, Pages 147 through 167.
- b. AR 750-7, Installation Materiel Maintenance Concepts and Policies.

2. Statement of Recommendations:

- a. 89A. "That Installation Maintenance peacetime workloads be correlated with wartime missions for all nondivisional Direct Support and General Support (DS/GS) units."
- b. 89B. "That MACOMs stipulate guidelines for installation support plans for TOE maintenance units in post support roles."
- 3. Rationale for Recommendation: None is provided within the study.
- 4. Analysis of Recommendation:
- 89A. That Installation Maintenance peacetime workloads be correlated with wartime missions for all nondivisional Direct Support and General Support (DS/GS) units.

Agree with the recommendation in that it addresses goals which are functions of good management, leadership and prudent application of available resources, to facilitate transition from peacetime to wartime operations. In this respect implementation is considered to be ongoing. The mobilization maintenance support requirement for installations is being assessed by FORSCOM to determine adequacy of TDA/TOE structures, equipment need and facilities. Milestones submitted by FORSCOM indicated that study should be in final stage by close FY 82.

89B. That MACOMs stipulate guidelines for installation support plans for TOE maintenance units in post support roles.

- a. AR 750-1 states TOE DS and GS maintenance units within CONUS will be assigned operational support missions as part of the CONUS training base. Nondivisional units will provide this support under the operational or technical control of the installation Director of Industrial Operations (DIO). However, such units will not be absorbed into the operations of installation TDA materiel maintenance activities; they will function as separate units. In assigning missions to TOE maintenance units, installation commanders will consider the need for continuity of capability in the installation material The productive capability of the installation maintenance activities. materiel maintenance activity must be sustained at a level which can readily be expanded to support mobilization workloads and the maintenance requirements when TOE maintenance units are deployed, transferred, reorganized, or engaged in extended field training exercises.
- b. The ability of a deployable TOE wartime unit to achieve a correlation between peacetime workload requirement and wartime environment can be achieved since the basic skills and training requirements are the same, only the quantity and intensity of effort differ. Full realization of workload requirements can be obtained based on lessons learned in the peacetime mode. An expansion of sample data peacetime workloads can be used in a prediction model to achieve at least a reference point on which to base wartime planning. A capability exists within the DARCOM community to develop such a model. Recovery of battle-damaged equipment, operations under hostile fire, and the operation of large salvage and cannibalization points, are examples of modes which are difficult to simulate with complete realism in major training and deployment exercises. However, similar modeling techniques apply.
- 5. Relationship to Other Studies: None.
- 6. Relationship to Other Recommendations within the Study of Army Logistics 1981. None
- 7. Coordination: OASA (IL&FM) and the ALA functional point of contact for maintenance concur with this memorandum.

TOPIC: MODERNIZATION/EQUIPMENT REDISTRIBUTION PLANNING

RECOMMENDATION NUMBER: 89C

STUDY LOCATION (VOLUME-PAGE): 17-166

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQR)

- a. Study of Army Logistics 1981, Section 17, pages 162, 165, and 166.
- b. DA PAM 5-25, Army Modernization Information Memorandum (AMIM), August, 1981.
- 2. Statement of Recommendation: "That DA insure early/continued MACOM involvement in modernization/equipment redistribution planning."
- 3. Rationale for Recommendation: The study states that FORSCOM has raised the problem of their inability to plan effectively for new equipment support and maintenance work on equipment to be redistributed to Reserve Components under Active Component modernization caused by frequent changes to the AMIM and lack of structured equipment redistribution plans.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue for several years.
- a. Distribution of equipment being freed up by new equipment is a problem area that Army Staff (ODCSOPS and ODCSLOG) is currently working. ODCSLOG is responsible for routine redistribution of equipment which becomes excess. Excess items are routinely redistributed within MACOMs to claimants in DAMPL sequence, who are located near the excess materiel. Modernization redistribution of large numbers of items dictate a higher degree of management than what has been provided in the past. Therefore, a Decision Memorandum and a proposed VCSA letter on Distribution of Displaced Equipment have been prepared (being staffed at this time to include MACOM comments on policy letter) which will provide policy and guidance governing the equipment displaced. The policy letter will require: MACOM involvement in identifying the units (UIC) receiving new equipment; ODCSLOG to provide numbers and schedule of items by LIN estimated to be available for redistribution; and ODCSOPS to provide redistribution plans to MACOM level of detail and provide MACOM priorities for distributing to UIC level of detail.

- b. The ability to cope with continuous changes in modernization requirements, e.g., force structure changes, Congressional budget cuts, distribution plan changes, manpower constraints, etc., is a fact of life which the Army as a whole must accept as its challenge. Efforts are ongoing to minimize changes that impact on MACOMs. A policy implemented in 1981 reduced the number of distribution plans being sent to the field from four to two; other minor changes are normally held by DA and provided once each year in the AMIM: formal MRIS reviews (once annually) have also been implemented to capture better data and insure MACOM involvement in preparing modernization costs.
- 5. Benefits of Implementation: A Distribution of Displaced Equipment policy letter followed by Displaced Equipment Distribution Plans will greatly assist MACOMs' ability to more effectively plan for support and maintenance work requirements in the future.
- 6. Resources Required for Implementation: This recommendation is being implemented using available resources at HQDA. Impact on MACOMs is not yet known.
- 7. Method of Implementation: Offices are already established within the ${\tt HQDA\ TDA.}$
- 8. Relationship to Other Studies: NA.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: Implementation of Displaced Distribution Plans will directly relate to the issue of "Provision for repair/refurbishment (by post) of displaced equipment for redistribution."
- 10. Coordination: ODCSLOG and AFMCO concur.

TOPIC: MOBILIZATION SUPPORT REQUIREMENTS

RECOMMENDATION NUMBER: 89D

STUDY LOCATION (VOLUME-PAGE): 17-167

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- 1. Reference Study of Army Logistics 1981, Section 17, Page 167.
- 2. Statement of Recommendation: "Review Mobilization Support Requirements for all CONUS Posts to determine TDA/TOE Expansion and Facilities Needs, versus Mobilization buildup/training plans, versus deployment of active Army CONUS TOE maintenance units."
- 3. Rationale for Recommendation: The study states that, upon mobilization, Active Army TOE maintenance units would in many cases deploy from CONUS installations, leaving at least a temporary deficit in maintenance capability to support intensified training and staging. Further, because of revised planning which includes RDF/contingency corps deployments, new support impact assessments must be developed for CONUS posts.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing.
- a. The Supply and Maintenance Policy Division, Directorate for Supply and Maintenance, is charged with staff overview of maintenance mobilization support policy; however, FORSCOM, TRADOC, and DARCOM all play key roles.
- b. Mobilization maintenance support requirement for installations is being assessed by FORSCOM to determine adequacy of TDA/TOE structures, equipment needs, and facilities.
- c. Milestones submitted by FORSCOM indicate that study should be in final stage by October 1982.
- d. As a follow-on action, project "Viable Solution" being developed by Electronic Data Systems Corp will be looked at as a possible implementation tool for updating and maintaining a current status of support facilities, equipment, and manpower capabilities.
- 5. Benefits of Implementation: Establish a modern method of predicting expansion implications and the effect on personnel and facilities.
- 6. Resources required for implementation cannot be determined at this time. A decision will be made regarding further study by contractor or Army agency when the FORSCOM assessment is completed.

- 7. Relationship to Other Studies: No known relationship.
- 8. Relationship to Other Recommendations within the Study of Army Logistics--1981: This recommendation is not directly tied to other recommendations within the study; however, it may have strong impact on other study recommendations pertaining to correlation of peacetime workloads with wartime TOE missions for all nondivisional DS and GS units.
- 9. Coordination: DARCOM, FORSCOM, TRADOC.

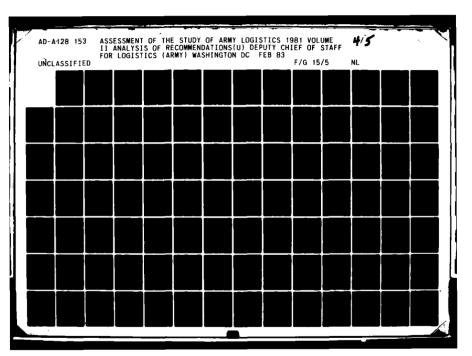
TOPIC: COMPONENT REPAIR

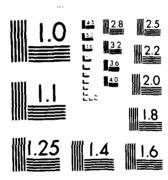
RECOMMENDATION NUMBER: 89E

STUDY LOCATION (VOLUME-PAGE): 17-167

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-P)

- a. Study of Army Logistics 1981, section 17, pages 17-161.
- b. AR 10-11, Organization and Functions, 9 Mar 77.
- c. AP 700-4, Logistic Assistance Program, 1 Dec 78.
- d. AR 750-1, Army Materiel Maintenance Concepts and Policies, 1 Apr 78.
- e. AR 725-50, Requisition and Issue of Supplies and Equipment, 28 Jun 74.
- 2. Statement of Recommendation: "That DARCOM and FORSCOM/TRADOC continue worksharing for depot and GS component repair:
 - a. To increase component availability.
 - b. To achieve economic/quantitative efficiencies.
 - c. To increase readiness."
- 3. Rationale for Recommendation: Current maintenance practices were determined to be sound; the system, however, needed to be improved to reduce turnaround time at both depot and installations to enhance FORSCOM's material readiness posture and to reduce overall cost.
- 4. Analysis of Recommendation:
- a. Because of transportation cost, GS work at depots is more expensive than if work is done at the installations.
- b. FORSCOM was performing GS maintenance in accordance with present maintenance allocation charts. With existing resources, FORSCOM handled 75 percent of the GS workload with the remaining 25 percent being evacuated to DARCOM depots. The desired split is 90 percent at installations and 10 percent overflow to depot.





MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963 A

- c. A joint FORSCOM/DARCOM study group developed a GS/Depot Maintenance Balanced Workload Plan which was approved by the respective commanders. This plan includes TACOM supported PAA funded components. Installations programed their GS maintenance using FY 82 resources. Through the development of criteria, the study group identified the level at which the GS maintenance would be performed. This information was then translated into a number of PAA components at each FORSCOM installation. This identification will serve the planning efforts of both FORSCOM and DARCOM.
- 5. Benefits of Implementation: The intent of the GS/Depot Maintenance Workload Plan is not to create a "Closed Loop Per Se" but rather to develop or enhance current procedures, whereby the ongoing supply system (turn-in and requisition replacement) can be utilized more effectively with minimum modification or intensified management.
- 6. Resources Required for Implementation: N/A.
- 7. Method of Implementation:
- a. The nine FORSCOM divisional installations will perform GS maintenance in the following descending priority: end items, stock-funded components, PAA funded components.
- b. Changes in quantity of PAA funded components programed for return to the wholesale system in FY 82 will require HQ FORSCOM approval prior to evacuation to depot.
- c. General Support Repair of Selected Assemblies Report, FORSCOM Form 130R, will be used by HQ FORSCOM in measuring the results of the GS/Depot Maintenance Balance Workload Plan.
- d. The concept addressed in this plan could be expanded to encompass TRADOC if required.
- 8. Method of Implementation: The FORSCOM/DARCOM GS and Depot Maintenance Balance Workload Plan for FY 82 has been implemented. The plan calls for a mid-year review for adjustment of items and quantity, to consider other commodity areas, and to compile FY 83 workload.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: DARCOM, TRADOC, FORSCOM, DALO-RMB, and DACS-ODA concur.

TOPIC: REDISTRIBUTION

RECOMMENDATION NUMBER: 89F

STUDY LOCATION (VOLUME-PAGE): 17-166

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-U)

- a. Study of Army Logistics--1981, Section 17, Page 166.
- b. Army Regulation 750-1, 1 Apr 78, Army Materiel Maintenance Concepts and Policies.
- c. HQDA message (DALO-SMP-U) 171757Z Feb 82, subject: Standards for Maintenance and Inspection.
- d. HQDA message (DALO-SML) 190234Z Mar 82, subject: Interim Displaced System Support Policy.
- e. HQDA message (DALO-SMP-U) 171823Z May 82, subject: Maintenance Standards for Equipment Transfer.
- 2. Statement of Recommendation: "That DA insure provisions for repair/refurbishment (by posts) of displaced equipment for redistribution."
- 3. Rationale for Recommendation: Force Modernization will result in many existing weapon systems/equipment being redistributed over the next several years. It is essential that both the losing and gaining commands clearly understand the required state of repair (condition) of the equipment to be redistributed.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue. Reference b requires that Army equipment be maintained in a state of repair as outlined in the applicable technical manual and by the Preventive Maintenance Checks and Services (PMCS) contained in the -10 and -20 Technical Manuals (TM). Reference c provided clarification to the field on standards for maintenance and inspection. Reference d contained several policies pertaining specifically to displaced systems and was staffed worldwide. MACOMs, including the National Guard Bureau, concurred with these Reference e reiterated that displaced equipment redistributed (transferred) directly to the gaining unit, would be in a state of repair required by the PMCS criteria in -10/-20 TMs. While overhaul (refurbishment) is not performed at the user level, equipment requiring depot level maintenance will be turned in to the respective depot maintenance activity prior to being redistributed to the gaining command. These items do not

require -10/-20 TM standards but must be complete to include Basic Issue Items (BII). Reference e restated the DA policy on equipment transfer standards at a considerably more detailed level.

- 5. Benefits of Implementation: Clearly stated policy governing the state of repair/refurbishment required for displaced equipment being redistributed will facilitate agreement between gaining and losing commands over the required condition of equipment being transferred.
- 6. Resources Required for Implementation: The -10/-20 TM standards specified for displaced equipment reflect no change from existing policy. The criteria for depot overhaul is no different for displaced equipment than any other equipment, therefore increases for depot overhaul will not be experienced.
- 7. Method of Implementation: Commanders and staffs at appropriate levels of execution are responsible for insuring compliance with established criteria.
- 8. Relationship to Other Studies: This recommendation is not related to other studies.
- 9. Relationship to Other Recommendations within the Study of Army Logistics-1981: This recommendation is related to Recommendation #89C.
- 10. Coordination: ODCSOPS, DARCOM, NGB.

FUNCTIONAL AREA: Doctrine

TOPIC: CORPS LOGISTICAL SUPPORT AVIATION

RECOMMENDATION NUMBER: 91

STUDY LOCATION (VOLUME-PAGE): 18-80, 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-AV)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics 1981, page 18-80.
- (2) Aviation Requirements for the Combat Structure of the Army (ARCSA) III Study 1976.
- b. Statement of Recommendation: "Corps logistical support aviation should be assigned to COSCOM."
- c. Rationale for Recommendation: The study states that as a result of the 1976 ARCSA III Study, all aviation assets were removed from the Corps Support Command. The Study of Army Logistics states that the rationale for this removal was apparently to reduce the number of aviation TOE by combining Sections and Detachments into standardized units and placing them under the control of a centralized aviation manager/commander. The Study of Army Logistics 1981 further states that the primary mission of the Medium Lift Helicopter is logistical support; a COSCOM responsibility, and doctrine has not been changed to establish clear procedures for the COSCOM to obtain responsive medium lift helicopter support.

d. Analysis of Recommendation:

(1) Missions for the CH-47 helicopters include combat, combat The highest priority mission on the support, and combat service support. battlefield will depend on the tactical situation at any given time. Assigning Corps CH-47's to the Corps Support Command would decrease the flexibility of the Corps aviation assets. The Corps Commander exercises intensive management of scarce CH-47 helicopter assets and other Corps aviation through the Corps Aviation Group/Brigade Commander. The doctrine and medium organization exists for establishing responsive helicopter support in the Corps regardless of the mission. The Corps Commander determines which missions will have priority.

- (2) Logistics supply support accounts for 69% of the missions for the CH-47 medium lift helicopter in the 1980 CH-47 modernization cost and operational effectiveness analysis update. Moving field artillery, air defense artillery and special weapons encompasses 4%, engineer support 8%, troop movement 5%, and miscellaneous missions the remaining 14%.
- (3) Subsequently to the ARSCA III Study, the CH-47 Medium Lift Helicopter Company TOE has been revised to add a third platoon of eight CH-47 helicopters with required support equipment, thus increasing total aircraft available and enhancing responsiveness to all customers. All CH-47 Company TOE will have 24 helicopters, divided into three platoons of eight aircraft. Each platoon will have the capability for detached duty of 30-60 days to provide dedicated support during this period. The Corps Aviation Group Commander can provide required medium lift helicopter support by platoon to the COSCOM, a combat division or any other element or agency needing it.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations Within the Study of Army Logistics 1981: None.
 - g. ODCSOPS and TRADOC concur.

3. Recommendation:

- a. Do not adopt the study recommendation to assign Corps logistical support aviation to the Corps Support Command.
- b. Continue the policy of assigning Corps aviation units to the Corps Aviation Group/Brigade.

FUNCTIONAL AREA: Doctrine

TOPIC: MOVEMENT CONTROL DOCTRINE

RECOMMENDATION NUMBER: 92

STUDY LOCATION (VOLUME-PAGE): 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSM)

1. Reference:

- a. Study of Army Logistics 1981, Section 18, pages 91-92.
- b. USATSCH Message, ATSP-CD-CS, subject: Revised Movement Control Doctrine for Independent Corps, dtg 101600Z Dec 81.
- 2. Statement of Recommendation:

"Revise movement control doctrine for independent Corps."

3. Rationale for Recommendation:

The COSCOM Movement Control Center (MCC) when operating in an independent Corps or Joint Task Force (JTF) environment assumes an expanded mission. This includes, but is not limited to, clearance and onward movement of air and sea cargo. The volume of information handled and communications required exceed that normally accomplished by a Corps' MCC in a sophisticated Theater Army environment supported by a Theater Transportation Management Agency (TMA).

4. Analysis of Recommendation:

- a. The study states that no established doctrine exists that describes the role and functions of an independent Corps MCC.
- b. Movement control doctrine for both Theater Army and Corps is provided by FM 55-10.
- (1) If a Corps is operating as an independent force, the Corps MCC must accomplish those functions normally assigned to the theater MCC. Therefore, the basic doctrinal approach to corps movement management may be tailored to ensure all anticipated movement control functions can be satisfied.

- (2) The ability to do this is facilitated by the commonality of doctrine and organization between Theater and Corps level MCC. Cellular teams from TOE 55-540 and 55-580 can be assigned to the Corps MCC to ensure that adequate and appropriate personnel augmentation is available to provide those missions anticipated by the independent Corps.
- c. The USATSCH is currently revising FM 55-10 to include more explicit information on operations by an independent Corps or JTF. The coordinating draft is scheduled for distribution to the field in the 1st quarter FY 83.
- (1) This revised concept reflects a more sophisticated movement control system in the contingency Corps operating area.
- (2) An emerging orientation which views the criticality of transportation management to support an independent Corps, may manifest itself in an organizational structure that superimposes a movement control center (MCC) at an echelon-above-corps (EAC).
- (3) It is envisioned that this concept would result in more efficient and responsive movement management, without detracting from the contingency Corps' primary tactical mission.

5. Benefits of Implementation:

Current doctrine provides an adequate basis by which a Corps MCC can organize to support independent operations. This doctrine is continually being revised to ensure it is responsive to changing requirements.

6. Resources Required for Implementation:

No resources are required in excess of those already programmed to complete revision of FM 55-10.

7. Method of Implementation:

The USATSCH will continue to develop responsive movement control doctrine. The Commander of the independent Corps or JTF must ensure his movement control element is organized to provide efficient, centralized movement management in its area of operation. This may require that the Commander tailor his Corps MCC with appropriate cellular teams to ensure the level of service necessary to meet mission requirements.

8. Relationship with Other Studies:

This recommendation is not related to any other studies.

9. Relationship to Other Recommendations:

This recommendation is not influenced or paced by any other recommendation within the study.

10. Coordination: USATSCH concurs.

TOPIC: PROCURE REQUIRED TRUCKS

RECOMMENDATION NUMBER: 93

STUDY LOCATION: (VOLUME-PAGE): 18-126

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQA)

- a. Study of Army Logistics 1981, Section 18.
- b. Memorandum, DAMA-ZA, for Vice Chief of Staff, Army, 16 April 1981, subject: Tactical and Support Vehicles--DECISION MEMORANDUM.
 - c. Tactical Wheeled Vehicle Fleet Requirements Study, October 1980.
- 2. Statement of Recommendation: "Procure Required Trucks."
- 3. Rationale for Recommendation: The study states that there is a significant shortage of tactical wheeled vehicles which continue through the program years.
- 4. Analysis of Recommendation: The problems associated with tactical/support vehicles are known and shortages against the Army Authorization Objectives (AAO) will continue through the program years. The Army Staff provided information to the Army Logistics Study and concurred in their recommendation that there is a need to procure additional trucks.
- 5. Benefits of Implementation: The maximum number of trucks in a resource constrained environment will be procured recognizing the Army cannot afford to buy out the AAO while maintaining balanced procurement programs.
- 6. Resources Required for Implementation:
- a. The Army Staff plan approved in May 1981 has resulted in a tactical vehicle program of \$7.9 billion in Budget 83-87.
- b. In general, funds to procure required vehicles to equip the active and reserve units have been programed during FY 83-87 period with some progress toward resolving the overage problem during the out years. A buy out of the AAO is not planned due to funding constraints and efforts to maintain an overall balanced Army program. It is recognized that this will result in continued shortages.

7. Method of Implementation:

- a. On 12 May 1981, the VCSA approved the Army Staff proposal to contain further degradation of the tactical wheel vehicle fleet by maintaining a high level of funding during FY 81-87.
- b. The increased priority accorded to the procurement of required trucks can be seen by comparing the January 1981 Carter Budget of approximately \$3.6 billion during 1981-1987 with the current 1983 through 1987 program of nearly \$8 billion programed for wheeled vehicles. However, again as noted above this \$8 billion does not fulfill our AAO requirements.
- 8. Relationship to Other Studies: The Tactical Wheeled Vehicle Fleet Requirements (TWVFR) Study of October 1980 provided an analysis of the entire truck fleet needs. Neither the TWVFR Study of Army Logistics Study 1981 recognized the reality of funding constraints.
- 9. Relationships to Other Recommendations within the Study of Army Logistics 1981: Recommendations affecting force structure and TOE changes will impact on trucks. The POM process will allow the Army Staff to react to significant changes in truck requirements or priorities.
- 10. Coordination: ODCSRDA, ODCSLOG, PA&E, and the ALA Functional Area point of contact for tactical wheeled vehicles concur.

TOPIC: AIRDROP RESUPPLY

RECOMMENDATION NUMBER: 94

STUDY LOCATION (VOLUME-PAGE): 18-110, 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLO)

1. Reference:

- a. Study of Army Logistics 1981, section 18, pages 103-110
- b. Army Logistics Center Staff Study, "Airdrop of 1 lies and Equipment," June 1981.
- 2. Statement of Recommendation: "That Army requirements for air : 'esupply be identified, to include size rigging units and supplies."
- 3. Rationale for Recommendation: The study states that a need exists to determine Army requirements for airdrop resupply so that supporting capabilities can be determined and associated resources identified for prioritization.

4. Analysis of Recommendation:

- a. Inquiries revealed that Army units, except airborne, rangers, and special forces, do not routinely plan for airdrop resupply. However, unless units anticipate and plan for airdrop resupply, they will continue to rely on surface transportation.
- b. The potential threat on the future battlefield could severely hamper surface transportation, creating a need to plan now for airdrop resupply and improve delivery techniques. TRADOC is evaluating new concepts for improving airdrop delivery methods, particularly applications of Low Altitude Parachute Extraction System (LAPES) and airdrop of large containers. This improvement effort was precipitated by improved capability of threat aircraft and the growing realization that units may not always be accessible by surface means of transportation. In concert with TRADOC's effort, all Army forces should develop plans for airdrop resupply so that equipment, units, and supplies can be identified to support requirements.
- c. Comments from MACOMs and reference 1b support the study's recommendation and suggest an expansion of the study to address force structure and aerial delivery equipment. Before expanding the study, however, MACOMs will have to conduct a detailed analysis of OPLANs under various scenarios to provide a more precise estimate of airdrop requirements.

- 5. Benefits of Implementation: Provide basis for determining future airdrop support requirements, to include units, personnel, and equipment.
- 6. Resources Required for Implementation: Recommendation can be implemented using available resources.
- 7. Methods of Implementation: It appears that an appropriate method of implementation would be to establish a task force, with ODCSLOG as lead, to analyze and pull together the varied aspects of airdrop resupply.
- 8. Relationship to Other Studies: TRADOC and Airborne Department, US Army Quartermaster School, are evaluating procedures to enhance airdrop techniques.
- 9. Relationship to Other Recommendations within Study of Army Logistics 1981: This recommendation is influenced by recommendation number 112F (Develop less labor intensive rigging equipment). Implementation of 112F would impact on the selection of airdrop equipment.
- 10. Coordination: ODCSOPS, ODCSRDA, TRADOC, Logistics Center, and the ALA Functional Area point of contact for troop support concur.

FUNCTIONAL AREA: Structure

TOPIC: GS POL CAPABILITY

RECOMMENDATION NUMBER: 96

STUDY LOCATION (VOLUME-PAGE): 20-42

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, page 20-50.
- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA, April 1978.
 - c. Army Logistics Assessment 1981.
- 2. Statement of Recommendation: "Provide a GS petroleum capability with each Corps in Europe."
- 3. Rationale for Recommendation: The Central Europe Pipeline System (CEPS) provides Bulk CL III forward to near the corps wartime sector rear boundries. However, there is little capability currently deployed to bridge the gap between the CEPS depots and the Corps CL III Supply Points/Divisional S&T Battalions.
- 4. Analysis of Recommendation: Implementation of the recommendation is ongoing and will continue.
- a. There are currently two transportation medium truck companies (POL), TO&E 55-018H62O, forward stationed in Europe under the 4th Transportation Command. A third unit is scheduled for activation in October of 82. USAREUR plans to chop one company to each corps subsequent to that activation. This will provide a nucleus of Bulk CL III GS capability in each forward deployed corps.
- b. In Slice 33 of the NATO Infrastructure Program, forward storage sites are planned which include Bulk CL III storage facilities. This will place additional fuel in hardened storage well forward in the corps areas. This pre-positioning will be of great value to the sustainability of the force, particularly in the early days of a conflict when the petroleum force structure availability is at a minimum. US support for this program thru continued funding is critical.

- c. USAREUR planning during the POM cycle includes activation of a petroleum supply company TO&E 10-227 for each corps. The storage capabilities of these units will augment the forward storage sites and provide the Corps Commander with greater flexibility with rapidly relocatable bulk CL III facilities.
- 5. Benefits of Implementation: Force structure will be available in the early days of a conflict to refuel forward deployed units and to fuel the equipment in POMCUS sets as units deploy to them.
- 6. Resources Required for Implementation:
- a. Funding POL activation of the 515th Transportation Medium Truck Companies is in the FY 84 budget.
- b. Continued support by the US to Slice 33 of the NATO Infrastructure funded forward storage site program is considered essential.
- c. Programming action for the petroleum supply companies to be forward stationed must be accomplished.
- 7. Method of Implementation: Continue support of activations and construction projects by ALCON is essential. Implementation of actions being proposed as Productivity Required Improvements in the Decade of the Eighties for petroleum units (PRIDE-POL) may have positive effect on bridging the gap without increased end strengths.
- 8. Relationship to Other Studies: Both references b and c are supportive of this recommendation.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation in this study.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area Point of Contact for POL concur.

TOPIC: POL (STANDARD COUPLING KIT)

RECOMMENDATION NUMBER: 97

STUDY LOCATION (VOLUME-PAGE): 20-42

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, page 20-50.
- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA, April 1978.
- 2. Statement of Recommendation: "A standard coupling kit be provided each unit scheduled for deployment."
- 3. Rationale for Recommendation: There exists a myriad of different sized couplings and fittings on bulk fuel handling equipment. Equipping each truck with a standard coupling kit will ensure that proper interface of truck-to-truck or truck-to-rail car connections can take place without delays to locate adapters. This is an RSI action.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue.
- a. 158 rail car couplings and 723 truck couplings were procured by USAREUR utilizing year end funds in FY 81. These couplings satisfy the requirements for forward deployed and currently POMCUS units.
- b. PDIP 893B includes funds to procure approximately 1,000 additional truck couplings for reinforcing units.
- c. It is DCSLOG's intention to issue the couplings to both active and reserve reinforcing units so that adequate training on their use can be accomplished.
- 5. Benefits of Implementation: Actions will ensure the proper connection of US Bulk CL III materiel with the materiel of NATO ally civilian and military fleets.
- 6. Resources Required for Implementation: Approximately \$100,000.
- 7. Method of Implementation: Obtain funding and procure.

- 8. Relationship to Other Studies: This recommendation is not influenced or paced by another recommendation in other studies.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation in the Study of Army Logistics 1981.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area Point of Contact for POL concur.

TOPIC: DFSC/MSC TANKER FLEET

RECOMMENDATION NUMBER: 98

STUDY LOCATION (VOLUME-PAGE): 20-16

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- 1. Reference Study of Army Logistics 1981, Section 20, pages 20-50.
- 2. Statement of Recommendation: "The Army Support DFSC/MSC Requirements for increases in the size of the tanker fleet."
- 3. Rationale for Recommendation: The study indicates that there is a requirement for more petroleum tankers in MSC's fleet to support contingency operations in a wide variety of environments. Current fleet is aging, must be augmented by chartered vessels which may or may not be available in the event of hostilities, and really is inadequate to support even current peacetime operations.
- 4. Analysis of Recommendation: MSC has articulated a need for an increase in the size of their tanker fleet, but has not yet quantified a specific number of bottoms which should be sought to the satisfaction of the Commander, MSC. They plan to develop an actual number of ships which should be sought during Joint Exercise Gallant Knight in coordination with DFSC.
- a. An ancillary issue which this recommendation raises is the requirement for smaller tankers to support LOTS operations and to operate in shallow waters. The current capability of the DOD is limited in this regard, and the doctrine for the use of small tankers and barges needs to be updated and improved.
- b. DALO-TSE will input requirements for delivery of small quantities of fuel to shallow water locations to DFSC during Exercise Gallant Knight. Our attempt will be to generate visibility of the problem faced with the inadequacies in this area, and to gain support not only for the increase in the size of the MSC tanker fleet but also for the smaller tankers.
- 5. Benefits of Implementation: MSC will be able to meet Army and other service requirements for bulk POL in a wider variety of circumstances.
- 6. Resources Required for Implementation:
- a. Resources for the program cannot be computed until the specific number of ships required has been determined. There will be resource implications in both dollars and personnel.

- b. Resources required to gain better shallow draft tanker support will also include dollar and personnel resources. Computation of the amounts required will be accomplished after Exercise Gallant Knight.
- 7. Method of Implementation: Materiel and manpower will be acquired via the PPBES process.
- 8. Relationship to Other Studies: SEAWARS 88, Exercise POLL Station, and other studies have documented a need for increases in the size of the tanker fleet.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within the study.
- 10. Coordination: ODCSOPS, ODCSRDA, and HQ DARCOM concur.

TOPIC: POL (WARTIME LOSS FACTOR)

RECOMMENDATION NUMBER: 99

STUDY LOCATION (VOLUME-PAGE): 20-25

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQL)

- a. Study of Army Logistics 1981, Section 20, pages 17-25.
- b. CAA Study "Combat Fuel Consumption Factors (CF)2" approved for distribution by ODCSOPS, August 1980.
- c. CAA Study "Wartime Requirements for Ammunition, Materiel, and Personnel, FY 88, Europe" Draft Report, January 1982.
- 2. Statement of Recommendation: "That a wartime loss factor be included in war reserve fuel requirements determination."
- 3. Rationale for Recommendation: The study states, "The CAA methodology for computing wartime fuel factors (WAFF) basically follows the existing ammunition model. The developed WAFF rates are used to attrite the consuming fleet of vehicles and war reserve vehicle stocks are used to replenish losses. The WAFF methodology confines fuel consumption to operational vehicles, therefore placing increased importance on the usage profiles."
- 4. Analysis of Recommendation:
- a. The WAFF methodology does not confine fuel consumption to operational vehicles.
 - b. Fuel requirements are generated based on:
 - (1) Operational vehicles in the combat area.
- (2) Vehicles operating in the rear areas out of the combat or division area.
 - (3) Vehicles moving between the maintenance area and the division area.
 - (4) Repairable vehicles being serviced in maintenance areas.
 - (5) Miscellaneous fuel losses such as fuel spillage.
 - (6) Fuel losses per catastrophic kill.

- c. The results of the WAFF studies are provided to the DA DCSLOG Army Energy office for incorporation in Supply Bulletin 710-2.
- 5. Benefits of Implementation: The use of SB 710-2 to determine war reserve fuel requirements will ensure that wartime loss factors are included.
- 6. Resources Required for Implementation: None, as the ongoing DA program for war reserve fuel requirements determination has been in effect since August 1980.
- 7. Method of Implementation: System for implementation has been in effect since August 1980.
- 8. Relationship to Other Studies: Requirements studies since the D82 study (1980) have and will continue to include wartime fuel factors determination. There is currently an ongoing examination of studies to see if fuel requirements are overstated, and if so, how to most judiciously decrease those requirements.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: DALO-TSE and CSCA-RQP concur.

TOPIC: POL

RECOMMENDATION NUMBER: 100

STUDY LOCATION (VOLUME-PAGE): 20-50

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, pages 20-50.
- b. TRADOC Study "Bulk POL Distribution in a Theater of Operations" approved for implementation by VCSA, April 1978.
- 2. Statement of Recommendation: "That DA ODCSLOG continue to monitor programs to assure the highest possible state of petroleum readiness."
- 3. Rationale for Recommendation: The study states that programs which develop and procure petroleum handling equipment significantly improve Army capabilities; as such, they warrant close scrutiny by the DA ODCSLOG.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. The Army Energy Office, Directorate for Transportation, Energy and Troop Support, is charged with Staff oversight of POL Logistics on a full-time basis.
- b. The Energy Office attends the Petroleum Materiel Requirements Conference which is hosted annually by TRADOC. The Conference attendees are representatives from ARSTAF, MACOMs, and Army Component Commanders. All facets relating to petroleum readiness are discussed, including establishment of priorities, and review of ongoing programs.
- c. As required, Army Energy Office personnel visit field activities and organizations and are continually involved in processing POL Logistics Staff actions within the Army, and to the Service and Joint Staffs.
- 5. Benefits of Implementation: Close monitoring places the POL Logistics Army Staff in a position to best influence current and future actions.

- 6. Resources Required for Implementation:
- a. The Army Energy Office POL Logistics Team is currently authorized one civilian and two military personnel.
- b. This recommendation is being fully implemented using available resources.
- c. There is no shortfall of resources needed to support operations for the POL Logistics Team.
- 7. Method of Implementation: Office is already established within the HQDA TDA. Funds are provided through appropriations which support the Army Staff.
- 8. Relationship to Other Studies: Past analysis has recognized the need for this office. Its need is periodically validated through the manpower survey process.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study. However, due to the nature of this recommendation, its implementation is key to the success of other recommendations which concern the management of POL Logistics.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area point of contact for POL concur.

TOPIC: DFSC FUEL STORAGE PROGRAM

RECOMMENDATION NUMBER: 101

STUDY LOCATION (VOLUME-PAGE): 20-16

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

1. Reference:

- a. Study of Army Logistics 1981, Section 20, page 20-50.
- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA April 1978.
- c. Defense Fuel Supply Center Inventory Management Plan published semiannually.
- 2. Statement of Recommendation: Army support DFSC fuel storage program.
- 3. Rationale for Recommendation: The Defense Fuel Supply Center (DFSC) became the integrated material manager for Bulk Cl III for DOD in 1973. The majority of Army pre-positioned war reserve stocks are held for the Army by DFSC. There is insufficient storage available to hold all of the requirement.
- 4. Analysis of R commendation:
- a. Current Army pre-positioned war reserve materiel requirement (PWRMR) equates to 16,154,581 barrels, worldwide, of which the Army can store 1,685,497 barrels. DFSC stores 9,520,325 barrels. Therefore, 5,948,759 barrels of Army PWRMR is uncovered.
- b. Current projections are that the Army PWRMR will increase to 17,794,000 barrels by 1988. Without additional storage, this 1,641,000 barrel increase in requirements will simply be additive to the 5,948,759 barrels currently uncovered.
 - c. DFSC is currently to lease commercial storage as follows in Europe:

1,225,000 barrels MOGAS 1,125,000 barrels diesel

1,000,000 barrels JP4

Most of this storage will be used for Army PWRMR.

5. Benefits of Implementation: Greater sustainability of the force will be achieved by pre-positioning fuel in storage, near the point of intended use.

- 6. Resources Required for Implementation: Expenses to lease the storage and to acquire product will be initially borne by DLA through the Defense Stock Fund. Ultimately, the Services pay for the storage, as all of DFSC's expenses are reimbursed.
- 7. Method of Implementation: Receive, review bids against the solicitation, award contracts, procure fuel. Strive for additional storage to hold remaining uncovered portion of the PWRMR.
- 8. Relationship to Other Studies: Other studies such as reference b and a new GAO report (currently in draft) substantiate the need for additional storage.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation of this study.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area Point of Contact for POL concur.

TOPIC: PLANNING FUEL REQUIREMENTS

RECOMMENDATION NUMBER: 102

STUDY LOCATION (VOLUME-PAGE): 20-25

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, pages 20-50.
- b. SB 710-2, Supply Control, Combat Consumption Rates for Ground and Aviation Type Petroleum Products.
- c. Combat Fuels Factor Study (CF2) conducted by the Concepts Analysis Agency.
- 2. Statement of Recommendation: "Adopt a standard usage profile for planning fuel requirements."
- 3. Rationale for Recommendation: Standardization of planning factors allows for reproducibility of computations and reliability of stated resource requirements.
- 4. Analysis of Recommendations: A standard usage profile will allow the computation of requirements in a systematic way. It will recognize the various modes of operation of tracked vehicles and the various consumption levels of those vehicles.
- a. The consumption rates of tracked vehicles in various modes (e.g., idle, cross-country, and secondary road movements) are contained in reference b.
 - b. The usage profiles are delineated in reference c.
- c. Both references b and c are under revision to capture new data being gained from experience with the vehicles.
- 5. Benefits of Implementation: The stated requirements for Class III bulk petroleum prepositioned near reserve materiel will have greater credibility.
- 6. Resources Required for Implementation: Sufficient resources exist to update the two references--an action which would occur in any event.
- 7. Method of Implementation: The General Materiel and Petroleum Activity (GMPA) will incorporate the usage profiles in their computation of POL PWRMR.

- 8. Relationship to Other Studies: This recommendation is supportive of those contained in the TRADOC sponsored study "Bulk Fuels Distribution in a Theater of Operations," approved for implementation in 1978.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 981. This recommendation is supported and paced by recommendation 105: To update fuel consumption factors as testing progresses.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC, and the ALA functional area point of contact for POL concur with this memorandum.

TOPIC: POL, WAR RESERVE REQUIREMENTS

RECOMMENDATION NUMBER: 103

STUDY LOCATION (VOLUME-PAGE): 20-25

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMW)

- a. Study of Army Logistics 1981, Section 20.
- b. USAREUR POL Distribution Plan.
- 2. Statement of Recommendation: "That initial POMCUS fill and movement to GDP fuel quantities be included in war reserve requirement."
- 3. Rationale for Recommendation: The study identifies a fuel shortfall in that fuel requirements for POMCUS equipment, now assumed to be available from peacetime operating stocks, should be additive to war reserve requirements, thereby insuring acknowledgment of all wartime requirements.
- 4. Analysis of Recommendation:
- a. The War Reserve Division, Directorate for Supply and Maintenance, is charged with staff oversight in determining wartime requirements of POL products.
 - b. Implementation of recommendation is ongoing and will continue.
- c. Current requirements for war reserves of bulk POL products only included combat consumption, assuming units have reached their GDP location.
- d. Recommendation in 1a is the basis for development of fuel requirements to move equipment from current sites to their GDP.
- e. Recommendation in 1a will include all requirements not only for POMCUS units but for all Active Forward Deployed Units who are not in their GDP location.
- f. Factors needed to compute requirements will be developed and resultant requirement added to wartime consumption levels to provide a total wartime requirement for a theater.
- g. Prior to adding these requirements to war reserve levels, an evaluation will be made of estimated remaining peacetime operating stocks at M-Day, to be sure that units relocating requirements are fully justified.

- 5. Benefits of Implementation: If implemented, war reserve requirements for bulk fuel for USAREUR will include that consumption necessary to move equipment from current site locations to their GDP location without drawing on combat consumption requirements.
- 6. Resources Required for Implementation: POL requirements are justified by the Army to DLA who is responsible for procuring, storing, and monitoring bulk fuels. This requirement will add to the total requirement, but may not affect current stockage due to storage capability limitations.

7. Method of Implementation:

- a. DARCOM will be tasked to separately compute the requirements for bulk necessary to move POMCUS and Forward Deployed Units equipment from current sites to their GDP.
- b. ODCSLOG, in coordination with USAREUR, TRADOC and ODCSOPS will determine a methodology for estimating distance to be used in computing consumption requirements.
- 8. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not related or paced by any other recommendation within this study. However, the requirements developed for this support as well as the total requirement will be affected by Number 99, "Provide a wartime loss factor in requirements determination."
- 9. Coordination: TRADOC, DARCOM, USAREUR, ODCSOPS, and the ALA functional area POC concur.

TOPIC: DIV 86 HEAVY ORGANIZATION FOR FUEL HANDLING

RECOMMENDATION NUMBER: 104

STUDY LOCATION (VOLUME-PAGE): 20-31

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, page 20-50.
- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA April 1978.
- 2. Statement of Recommendation: "Div 86 Heavy Organization for fuel handling remain unchanged."
- 3. Rationale for Recommendation: Force structure for fuel storage and distribution for Division 86 has been well planned to meet accelerated requirements.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue:
- a. Close coordination among the ODCSLOG, ODCSOPS, DARCOM, TRADOC, and FORSCOM has been effected to tailor the organization.
- b. Increased requirements for fuel are caused by new equipment fielding and by the concept for employment which envisions rapidly moving forces on a fluid battlefield.
- c. The structure of the fuel organization for Division 86 optimizes the doctrine recommended in reference b.
- 5. Benefits of Implementation: Planning which has been accomplished for the organization will come to fruition.
- 6. Resources Required for Implementation: Unknown.
- 7. Method of Implementation: Activation of units required and TO&E modifications to include new equipment under development.
- 8. Relationship to Other Studies: This recommendation supports those contained in reference b.

- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation is not influenced or paced by another recommendation in the Study of Army Logistics 1981.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA functional area point of contact concur.

TOPIC: POL, FUEL CONSUMPTION FACTORS

RECOMMENDATION NUMBER: 105

STUDY LOCATION (VOLUME-PAGE): 20-31

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, pages 20-50.
- b. SB 710-2, Supply Control, Combat Consumption Rates for Ground and Aviation Type Petroleum Products, February 1981.
- 2. Statement of Recommendation: "Update Fuel Consumption Factors as testing progresses."
- 3. Rationale for Recommendation: Consumption data is the basic element on which pre-positioned war reserves are computed. As modifications are made to existing materiel, as new items are developed, and as better data is available from actual usage of equipment in the field, the consumption factors used in these computations must be updated.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue.
- a. Reference b was published in 1981 and reflects the best data available at the date of production. DESCOM now has charged each of the Materiel Readiness Centers (MRCs) which are responsible for the management of bulk fuel consuming items of equipment with an annual update of the factors.
- b. The General Materiel and Petroleum Activity receives the consolidated updated machine listing from the DESCOM and compares the revised factors to those published in SB. Significant changes are provided to Army planners worldwide.
- 5. Benefits of Implementation: More accurate computation of War Reserve Requirements to ensure sustainability will be achieved.
- 6. Resources Required for Implementation: Recommendation will be accomplished within existing resources.
- 7. Method of Implementation: Continuous review of factors by the MRCs.

- 8. Relationship to Other Studies: This recommendation parallels those contained in the VCSA-approved TRADOC study "Bulk Fuels Distribution in a Theater of Operations." Progress in achieving it is monitored at the annual Petroleum Analysis Group meeting at the Logistics Evaluation Agency.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation will pace the accomplishment of recommendation #103 to develop War Reserve Requirements for the fill of POMCUS and for unit displacement to GDPs.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, and TRADOC concur.

TOPIC: POL MANAGEMENT

RECOMMENDATION NUMBER: 106

STUDY LOCATION (VOLUME-PAGE): 20-50

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

1. Reference:

a. Study of Army Logistics - 1981, Section 20, page 20-50.

- b. "Bulk Fuels Distribution in a Theater of Operations," TRADOC Sponsored Study, 1978.
- 2. Statement of Recommendation: "ODCSLOG DA Monitor POL Equipment Development and Procurement Programs."
- 3. Rationale of Recommendation: Unique nature of bulk POL storage and distribution materiel requires careful coordination to insure that adequate quantities are on hand in the units of the force structure and that the equipment interfaces properly to insure interoperability. Relative low density of the materiel within the force structure requires careful management of maintenance. The relatively short shelf life of many components (collapsible bags, hoselines, etc.) requires careful management to avoid costly acquisitions of materiel which cannot be utilized.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue.
- a. The establishment of a Project Office in TSARCOM has provided visibility over the on-hand stock status and the procurement program for the equipment. HQDA should continue to support the efforts of that office.
- b. There is a need for the establishment of a POL Management Office within HQ DARCOM to monitor the total efforts of the DARCOM community in the acquisition and development processes for this type of materiel. Several DARCOM sub-elements participate in the process, and the need exists to carefully orchestrate their endeavors.
- c. The DA ODCSLOG participates in the TRADOC-sponsored annual Petroleum Materiel Requirements Conference conducted at Ft Lee each December. In this forum, the status of the materiel is reviewed, and the actions to be taken during the coming year are established and reviewed.

- 5. Benefits of Implementation: As was demonstrated in the Army Logistics Assessment, 1981, careful evaluation of the status of POL equipment is necessary to insure sustainability of the force. Without such evaluation, articulation of needs is impossible.
- 6. Resources Required for Implementation: Implementation of the recommendation is being accomplished within existing resources. Additional resources may be required to establish a POL Management Office within HQ DARCOM. DARCOM is assessing the requirement at this time, and will determine resource implications as the structure of the office is established.
- 7. Method of Implementation: Continue the efforts of the POL Equipment Manager within TSARCOM and the annual TRADOC-sponsored review. Continue to work closely with ODCSOPS on requirements and with ODCSRDA on acquisitions. Participate in the Army Master Plan (AMP) Conference to insure adequacy of the acquisition plans, and participate in In-Progress Reviews (IPRs) on the developmental items.
- 8. Relationship to Other Studies: This recommendation supports reference b, and is supported by the efforts required to accomplish the Army Logistics Assessment 1981.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is influenced by recommendations 97, 100, and 104, all of which deal with the development, acquisition, fielding, and maintenance of POL handling materiels.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, and TRADOC concur.

TOPIC: INSTALLATION LEVEL POLICY FOR MOBILITY FUELS

RECOMMENDATION NUMBER: 107

STUDY LOCATION (VOLUME-PAGE): 20-57

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

1. Reference:

a. Study of Army Logistics - 1981, Section 20, page 20-50.

- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA April 1978.
 - c. Draft DOD Bulk Petroleum Stockage Policy.
- 2. Statement of Recommendation: "HQDA ODCSLOG promulgate installation level policy for mobility fuels."
- 3. Rationale for Recommendation: Currently, installations in CONUS do not store specified levels of mobility fuels. Installations are therefore prone to disruption during periods of supply curtailment, labor disputes, or severe weather.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. Army CONUS installations should store mobility fuels in sufficient quantities to enable alternate sources of supply to become available during such situations as outlined above.
- b. Mobilization will cause significant increases in requirements for mobility fuels, and mobilization could well take place in a time of supply curtailment from oil exporting countries. Mobility fuels stored on installations should therefore be in sufficient quantity to overcome surges in requirements caused by mobilization.
- c. A new draft bulk fuels stockage policy has been circulated by OASA(MRA&L) which will require mobility fuel stockage. That draft has been concurred in by HQDA.
- 5. Benefits of Implementation: Army installations will have flexibility to sustain operations through peak requirements periods and during periods of supply disruption.

- 6. Resources Required for Implementation: Unknown at this time.
- 7. Method of Implementation: DALO-TSE will task DARCOM to have the General Materiel and Petroleum Activity conduct an assessment of the current/needed storage facilities on CONUS installations to accomplish the mission of mobility fuel storage.
- 8. Relationship to Other Studies: Past analysis has recognized the need for this capability, but no authority to store materiel against the requirement has existed.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is influenced by recommendation 108 of this study.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area Point of Contact for POL concur.

TOPIC: INSTALLATION LEVEL POLICY FOR MOBILITY FUELS

RECOMMENDATION NUMBER: 108

STUDY LOCATION (VOLUME-PAGE): 20-57

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

- a. Study of Army Logistics 1981, Section 20, page 20-50.
- b. TRADOC study "Bulk Fuels Distribution in a Theater of Operations" approved for implementation by VCSA April 1978.
 - c. Draft OASD(MRA&L) Petroleum Stockage Policy.
- 2. Statement of Recommendation: "HQDA ODCSLOG determine installations fuel requirements and initial programs to provide storage."
- 3. Rationale for Recommendation: Mobility fuels are required on installations to provide flexibility of operations in periods of shortages and during mobilization.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. DALO-TSE will task DARCOM to task the General Materiel and Petroleum Activity to survey CONUS installations to determine fuel requirements and storage capabilities.
- b. CONUS installations will be required to submit MCA projects for storage of fuels required beyond their current capabilities.
- c. Fuel storage requirements will be passed to DFSC for interim storage pending MCA completion. A case-by-case analysis will be made of the advisability of using DFSC storage on a permanent basis if it meets the installations' requirements.
- 5. Benefits of Implementation: CONUS installations will have mobility fuels to meet current needs.
- 6. Resources Required for Implementation: Unknown at this time.
- 7. Method of Implementation: As indicated in para 4 above.

- 8. Relationship to Other Studies: This recommendation is influenced and supported by reference c_{\star}
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is paced by recommendation #107 of the Study of Army Logistics 1981.
- 10. Coordination: ODCSOPS, ODCSRDA, DARCOM, TRADOC, and the ALA Functional Area Point of Contact for POL concur.

FUNCTIONAL AREA: Management and Organization

TOPIC: POL

RECOMMENDATION NUMBER: 109

STUDY LOCATION (VOLUME-PAGE): 20-57

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE)

1. Reference:

a. Study of Army Logistics - 1981, Section 20, pages 20-50.

- b. US Army Audit Agency, Audit Report #WE 81-202, dated 3 November 1980, subject: Controls Over Bulk Petroleum.
- 2. Statement of Recommendation: "HQDA Develop Staffing Guides and Training Requirements for Installations Level Fuel Operations and Management."
- 3. Rationale for Recommendation: The O&MA funding for an installation's energy requirements represents a large portion of the total O&MA authorization for any Army installation. However, at most installations, no one activity is charged with the overall management of the energy program or providing useful and current training for fuel handlers:
- a. The skills and number of personnel required to accomplish the tasks of installation energy management have not yet been defined.
- b. Further, day-to-day operations of the installations are normally accomplished by civilian personnel. Yet there is no course of instruction via which these personnel can be trained.
- 4. Analysis of Recommendation: The recommendation has real merit and is being acted on by HQDA and TRADOC. Findings by the AAA per reference b support the recommendation:
- a. ODCSLOG PDIP #4S3H would fund for personnel to accomplish the function of installation energy management in FY 86.
- b. HQ TRADOC was requested to establish a training course for fuel operators engaged in daily fuel operations on installations in CONUS. The Quartermaster School is engaged in development of the Program of Instruction. The first iteration of the course is tentatively scheduled to be conducted in the third quarter, FY 82.

- 5. Benefits of Implementation: The total energy management function on installations would be conducted by a single office which would compute requirements, order fuel, accomplish the accounting function, and maintain inventories. Also, better trained personnel would be provided.
- 6. Resources Required for Implementation:
- a. The personnel required to accomplish overall energy management are already present on the installations, albeit perhaps not with the right skills or grades. Evaluation of the staffing guide will be accomplished by ODCSOPS in conjuncton with ODCSPER/ODCSLOG.
- b. The TRADOC course for fuel handlers will be conducted utilizing in place resources for the first two iterations. An assessment of additional resources required will be made after these initial offerings.
- 7. Method of Implementation:
- a. The Installation Staffing Guides will be modified to establish a separate Energy Management Office.
 - b. The training course will be implemented as described in 6b above.
- 8. Relationship to Other Studies: This recommendation closely parallels the findings made by AAA in reference b.
- 9. Ralationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced by another recommendation within this study.
- 10. Coordination: ODCSOPS, ODCSPER, and TRADOC concur.

TOPIC: ON-BOARD MATERIEL HANDLING EQUIPMENT

RECOMMENDATION NUMBERS: 110 and 120

STUDY LOCATION (VOLUME-PAGE): 21-25 to 21-30; 21-67 to 21-71; 21-75 to 21-79

PROPONENT OFFICE: HCDA ODCSOPS (DAMO-ROL)

1. Reference Study of Army Logistics - 1981, Section 21, pages 21-25 to 21-30, 21-67 to 21-71, and 21-75 to 21-79.

2. Statement of Recommendations:

- a. No. 110: "User cargo vehicles (should) be equipped with on-board material handling equipment (MHE)."
- b. No. 120: "Incorporate on-board materiel handling equipment on all user cargo vehicles earmarked for ammunition haul (prioritize issue for maximum system benefit); and on corps and theater stake and platform semitrailers and trailer with MHE per every four trailers)."

3. Rationale for Recommendations:

- a. Recommendation No. 110 is based on the study conclusion that the addition of on-board MHE improves the ammunition resupply of covering forces. The concept of support for ammunition transfer points (ATP's) in the study calls for the establishment of temporary ATP's which provide responsive, mobile, and dispersed ammunition support by means of selected stake and platform semitrailers with on-board MHE. Covering force resupply cargo vehicles with on-board MHE would speed up ammunition handling and transfer, reduce personnel requirements, and expand the number of customers which can be serviced in an ATP during surge conditions.
- b. Recommendation No. 120 is based on the study conclusion that administrative processing at ammunition supply points (ASP's) requires an inordinate amount of time compared to time needed for the actual loading of ammunition. The study found that 26 percent of the administrative processing time in an ASP was due to MHE queuing. Processing time in an ASP could be reduced by providing resupply vehicles with their own MHE.

4. Analysis of Recommendations:

a. Because of similarity, recommendations 110 and 120 should be combined into a single recommendation.

- b. The addition of MHE on resupply vehicles will reduce significantly the processing time in ASP's. A USA Logistics Center Study completed in June 1981 revealed that total administrative time in ASP's is nearly double the ammunition loading time.
- c. Adoption of these combined recommendations reduces the average density of vehicles in ASP's at any one time, reduces turn-around time for units drawing ammunition, and improves the surging capability of ASP's and responsiveness of ATP's.
- d. HQ TRADOC (ATCD-SL) verified the validity of both recommendations and provided the following proposed and emerging MHE for the vehicles indicated:
 - (1) Heavy Expanded Mobility Tactical Truck (HEMTT), 10 ton truck, M977.
 - (a) 2,500 lb crane, ammunition.
 - (b) 5,400 lb crane, Multiple Launched Rocket System, M983.
 - (c) 16,400 lb crane, PERSHING II.
 - (2) Field Artillery Ammunition Supply Vehicle (FAASV).

3,000 lb crane.

(3) Armored Forward Area Rearm Vehicle (AFARV).

3,000 lb crane.

- e. HQ TRADOC considers the cranes beneficial but noted the resultant sacrifice in cargo capacity. The greatest benefit of on-board MHE is the reduction (or elimination) of other MHE (forklifts, Front-end loaders) in the resupply process.
- f. The addition of MHE on selected stake and platform semitrailers to provide increased lift and additional flexibility is of questionable value.
- 5. Benefits of Implementation: Implementation of these recommendations expedites ammunition resupply of covering forces. The addition of on-board MHE to user transport improves handling and lift capability without additional force structure. On-board MHE becomes an extremely important feature for the user in an NBC environment. Other benefits are reduction of labor intensive transfer of ammunition by user, reduction of time required for ammunition transfer, and reduction of MHE queuing at ammunition supply points (ASP's) and ammunition transfer points.
- 6. Resources Required for Implementation: Additional funds are required for incorporation of on-board MHE to user cargo vehicles earmarked for ammunition haul. The vehicle driver would also perform duties as crane operator, a fact which requires some additional training. The number of soldiers detailed for ammunition handling decreases with addition of on-board MHE. Maintenance of and repair parts for MHE are other factors which require resource planning.

- 7. Method of Implementation:
- a. Recommendations 110 and 120 have been adopted for the programed systems listed in para 4d.
- b. TRADOC must determine or update required operational capabilities for any additional MHE systems.
- c. A systems management office should be established for the management of MHE from concept initiation to disposal.
 - d. Actual MHE requirements and priorities must be established.
- 8. Relationship to Other Studies: The Conventional Ammunition Special Review (CASPR) concluded that the lack of adequate MHE for ammunition handling units had resulted in inefficient operations for receipt and transfer of ammunition. CASPR concluded that life-cycle management of MHE and associated equipment was fragmented and that MHE problems could be attributed to lack of adequate resources and low priority in the competition of resources. CASPR recommended that actions be taken to determine MHE requirements and establish appropriate priorities. The 1977 Ammunition Initiatives Task Force documented the need for cranes on ammunition supply trucks in forward (corps) areas.
- 9. Relationship to Other Recommendations within the Study of Army Logistics: None.
- 10. oordination: ODCSLOG, ODCSRDA and the ALA functional area point of contact for ammunition concur with this memorandum.

TOPIC: COVERING FORCE RESUPPLY

RECOMMENDATION NUMBER: 110A

STUDY LOCATION (VOLUME-PAGE): 21-75 to 21-79

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- a. Study of Army Logistics 1981, Section 21, pages 75-79.
- b. Letter, HQDA, DALO-PLF, 28 Dec 81, subject: Study of Army Logistics 1981.
- 2. Statement of Recommendation: "Develop doctrine for covering force resupply which better meets objective support characteristics for airland battle of 90's."
- 3. Rationale for Recommendation: Doctrine is needed to promote an understanding of the various ways to accomplish the resupply of the covering force under the airland battlefield concepts.
- 4. Analysis of Recommendation: TRADOC is currently taking an in-depth look at covering force logistical support under the Combat Service Support Mission Area Analysis (CSSMAA). Analysis of deficiencies substantiate the void in doctrine. Several alternative approaches to providing the required support have been identified. However, these must be thoroughly assessed to determine which alternatives should be adopted. The CSSMAA will outline the alternatives, and the follow-on mission area development plan will establish the mechanism and timeframe for achieving the best alternative and implementing it into the programed force and CSS publications. CSSMAA is scheduled for completion in Dec 82.
- 5. Benefits of Implementation: Will promote a better understanding in the field of the doctrine for covering force resupply.
- 6. Resources Required for Implementation: To be determined as part of the analysis.
- 7. Method of Implementation: Covering force resupply procedures will be published in applicable field manuals (FM 63 series).



- 8. Relationship to Other Studies: CSSMAA.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: None:
- 10. Coordination: TRADOC concurs.

FUNCTIONAL AREA: Management and Organization

TOPIC: AMMUNITION MAINTENANCE

RECOMMENDATION NUMBER: 111

STUDY LOCATION (VOLUME-PAGE): 21-74

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMA)

1. Reference Study of Army Logistics - 1981, section 21.

- 2. Statement of Recommendation: "Recognizing existing and projected force structure limitations, develop a resource effective doctrine for the disposition of ammunition requiring more than minor maintenance."
- 3. Rationale for Recommendation: The first inclination is to conclude that ammunition requiring major work should be destroyed in place; however, this study concluded that, in light of the escalating cost of ammunition, particularly missiles, a more sophisticated and/or discretionary approach might be required.
- 4. Analysis of Recommendation: This recommendation has been fully implemented using available resources. Funds are provided through appropriations which support the Army. We should continue to pursue the dual policy of providing only organizational, direct support, and limited general support minor maintenance in the area of operations; and of evacuating ammunition requiring more extensive maintenance to fixed or semi-fixed facilities in the COMMZ or CONUS.
- a. Sustained maintenance of large quantities of unserviceable ammunition items is most efficiently and economically done utilizing fixed facilities which are oriented to production line techniques. These facilities provide experienced management, skilled and stable workforce, sophisticated equipment and program of replacement component support.
- b. A Materiel Management Center (MMC) located in an operating area would require staffing and expertise on the order of a CONUS National Maintenance Point (NMP) in order to manage major maintenance programs, e.g., programing and obtaining components to "start up" assembly lines.
- c. A separate theater system manager would be required for ammunition maintenance. This manager at Theater Army level would be required to ensure that voids in planning do not exist at any level, that plans are timely and can be executed, and that force structure considerations are realistic.
- d. Legislation would be required to ensure that US civilian employees and contract US personnel remain on their jobs during hostilities.

- e. Draft exemptions for host nation employees with military reserve commitments would have to be pursued and granted in peacetime.
- f. Even if major maintenance was done in a theater of operations, the wholesaler would have ultimate responsibility for support of the supply system for depot maintenance operations. Wholesale activities operate under the control of the Theater Army Commander as defined by MOU. An MOU between USAREUR/DARCOM would have to be developed if DARCOM was to assume the intheater maintenance mission.
- 5. Benefits of Implementation: Close monitoring places the ammunition Logistics Army Staff in a position to best influence current and future actions.
- 6. Resources Required for Implementation:
 - a. OMA P7M Renovation Program:
 - FY 82 Program \$46.0M funded FY 83 Program \$46.2M funded
- b. Funding has been developed which provides for full OMA P7M funding of all currently known munition maintenance requirements for FY 82 through FY 87, within fiscal year capability of being accomplished.
- 7. Method of Implementation: Through TRADOC, developed doctrine for logistic support and statements of material requirements that respond to the users' needs.
- 8. Relationship to Other Studies: Past analysis has recognized the need for this concept. It is periodically reviewed through the Maintenance Program Review. These logistics concepts were approved by DA 30 May 1978.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: ODCSOPS, ODCSRDA, and DARCOM concur.

TOPIC: EXTERNAL AIRLIFT OF AMMUNITION

RECOMMENDATION NUMBERS: 112A, 112B

STUDY LOCATION (VOLUME-PAGE): 21-66

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRU)

- 1. Reference Study of Army Logistics 1981, Section 21, pgs 21-65 and 66.
- 2. Statement of Supporting Recommendations:
 - a. Provide rigging expertise to ammo mission units.
 - b. Emphasize field training for combat and ammo mission units.
- 3. Rationale for Recommendations: The study states that there are problems that reflect adversely upon the Army's ability to externally airlift ammo to the required place. No additional rationale is given in the study.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing. Background: Initial field assessment was completed September 1982. It pointed to lack of emphasis for this type of training in Combat Service Support (CSS) MOS and leaders courses, and poor training standardization.
- a. TRADOC has been requested to develop and export applicable doctrine and material in support of service school POIs and Active Component/Reserve Component (AC/RC) unit ARTEPs (TAB A). The purpose is to train soldiers and units in this battlefield task.
- b. MACOMs have been encouraged to review unit battlefield requirements, and train to the rigging tasks where required (TAB B).
- 5. Benealts of Implementation: Soldiers and units will be trained to accomplish a critical battlefield task.
- 6. Resources Required for Implementation:
- a. Technical guidance: FM 55-450-1, Army External Helicopter Loads, fielded October 1982.
- b. Cargo nets and slings: CTA-stock funded-items; they are adequately available through the supply system; numbers required are unknown.
- c. Personnel and other material: TRADOC and unit plans of action to implement training will determine these requirements.

- 7. Method of Implementation: TRADOC export doctrine and material to service schools; units develop training based upon combat mission need.
- 8. Relationship to Other Studies: HELILOG Study, Airland Battle analyses.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981. These supporting recommendations are related to recommendation 112, and 112C thru 112F, respectively. They are not paced by these recommendations, but are of a complimentary nature.
- 10. Coordination: TRADOC (ATTG-OCS), ODCSRDA (DAMA-WSA), FORSCOM (AFOP-T), and ODCSLOG (DAMO-PLZ-C) concur.

TOPIC: RIGGING EQUIPMENT

RECOMMENDATION NUMBERS: 112C and 112D

STUDY LOCATION (VOLUME-PAGE): 21-61 to 21-66

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQL)

1. Reference Study of Army Logistics - 1981, Section 21, pages 21-61 to 21-66.

- 2. Statement of Recommendations:
- a. No. 112C: "Add rigging equipment to ammunition units' tables of organization and equipment (TOE). Evaluate if (rigging equipment) should be classified as expendable."
- b. No. 112D: "Develop (ammunition and rigging equipment) requirements for the 90's."
- 3. Rationale for Recommendations: In assessing the external airlift of ammunition, the Study of Army Logistics 1981 concluded that there is a potential for a large requirement for external airlift of ammunition and that there are significant deficiencies in the Army's ability to conduct resupply of ammunition (or other supplies) by external airlift. For example, the 1980 Cost and Operational Effectiveness Analysis (COEA) predicted that ammunition resupply missions would constitute 40 percent of available mission time for the CH-47 helicopter.

4. Analysis of Recommendations:

- a. Recommendation No. 112C has merit. Lack of rigging equipment in ammunition units is a shortcoming which reduces the Army's ability to accomplish external airlift of ammunition. Addition of rigging equipment improves that capability.
 - b. Availability of rigging equipment is a problem for several reasons:
- (1) A lack of awareness by using units of the availability of rigging equipment.
- (2) Although authorization for unit purchase of rigging equipment is found in Common Table of Allowances (CTA) documents, there is some reluctance to spend O&MA funds to purchase these stock funded items.
- (3) Some using units fail to recognize their responsibility to provide for their own nets and slings.
- c. In November 1981, US Army Materiel Development and Readiness Command (DARCOM) denied a USA Logistics Center request to change the authorization of rigging equipment from CTA to TOE.

- d. HQ FORSCOM (AFLG-POP) indicated that slings and nets necessary for emergency resupply should be added to the tables of organization and equipment for aviation units.
- e. Recommendation No. 112D has merit. However, the recommendation is extremely broad and may not be achievable, as stated, with any degree of confidence. In its assessment, HQ TRADOC (ATCD-SL) stated that this recommendation was addressed in the recently completed Combat Service Support Mission Area Analysis Level II (CSSMAA II). Other studies, such as AIRLAND Battle 2000 and HELILOG, indicate an increasing requirement for the external airlift of ammunition and may indicate a need for improved cargo handling equipment.
- 5. Benefits of Implementation: Adoption of these recommendations improves the Army's ability to conduct resupply of ammunition (or other supplies) by external airlift, and improves the efficiency of ammunition handling.
- 6. Resources Required for Implementation: MHE requirements must be prioritized and after preparation, approval, and application of appropriate requirements documents, a decision must be made in the prioritization process to program necessary funds. From a cost perspective, it appears more beneficial to classify rigging equipment as nonexpendable.

7. Method of Implementation:

- a. Rigging equipment requirements and priorities must be firmly established. USA Logistics Center has undertaken initiatives in this area.
- b. Combat Service Support Mission Area Analysis Level II findings and recommendations should be examined and adopted, if feasible.
- c. HQDA(DAMO-RQL) will continue to sponsor out-year ammunition requirements studies (programing studies) which are performed by USA Concepts Analysis Agency (CAA). The wartime ammunition and material requirements study for FY 86-90 (P90E) is currently underway at CAA.
- 8. Relationship to Other Studies: The Conventional Ammunition Special Review (CASPR) concluded that materiel handling equipment (MHE) authorizations for ammunition handling units were inadequate and resulted in inefficient handling of ammunition. CASPR found that no family of slings was available for handling ammunition, and recommended that actions be taken to determine MHE requirements and that those requirements be prioritized. CASPR further recommended that MHE identified as mission essential to ammunition handling units be declared pacing items and reported on unit status reports.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is not related to other recommendations within the study.
- 10. Coordination: ODCSLOG, ODCSRDA, and the ALA functional area point of contact for ammunition concur with this memorandum.

TOPIC: AIRLIFT POLICIES AND PROCEDURES IN CSS PUBLICATIONS

RECOMMENDATION NUMBER: 112E

STUDY LOCATION (VOLUME-PAGE): 21-61 to 21-66

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- a. Study of Army Logistics 1981, Section 21, pages 61-66
- 5. Letter, HQDA, DALO-PLF, 28 Dec 81, subject: Study of Army Logistics 1981.
- 3. Rationale for Recommendation: The field lacks knowledge on airlift doctrine/procedures.
- 4. Analysis of Recommendation: TRADOC has advised that airlift policies and procedures will be incorporated into CSS publications during normal update.
- 5. Benefits of Implementation: Will promote a better understanding in the field regarding external airlift of ammunition.
- 6. Resources Required for Implementation: None.
- 7. Method of Implementation: Airlift doctrine will be published in appropriate field manuals.
- 8. Relationship to Other Studies: This recommendation is related to the USALOGC, HELILOG Study, 1977.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: TRADOC concurs.

TOPIC: THROUGHPUT OF AMMO

RECOMMENDATION NUMBER: 113A

STUDY LOCATION (VOLUME-PAGE): 21-58 to 21-60

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMA)

- 1. Reference Study of Army Logistics 1981, Section 21, pages 21-58 to 21-60.
- 2. Statement of Recommendation: "Reevaluate doctrinal expectations for throughput of ammo to Ammunition Supply Points (ASPs) and/or Ammunition Transfer Points (ATPs) with consideration provided to advisability and ability to use 40-foot trailers beyond the Corps Storage Area (CSA)."
- 3. Rationale for Recommendation: This recommendation is based on the study observations that:
- a. Trailers available for line-haul of ammunition from the COMMZ to the Corps will be a mixture of 34.5-ton (40-foot long) trailers and 22.5-ton (28-foot long) trailers.
- b. The 40-foot long trailer is capable of transporting two 20-foot containers stuffed with ammunition. These containers would be loaded on the trailer end-to-end. The 28-foot long trailer is capable of transporting a single 20-foot container.
- c. Direct support ammunition units (TOE 9-64), which will operate ASPs, are not equipped to offload (i.e., ground) a full container from a trailer/transporter. Therefore, the arrival of a 40-foot long trailer with two containers loaded end-to-end poses problems. The rear container would have to be unstuffed first, and then grounded. The forward container would then be accessible and could be unstuffed. Finally, the grounded container would have to be reloaded on the trailer. Clearly this is a time-consuming, inefficient process.
- d. In addition, it is questionable whether the 40-foot trailers, because of their size, could be maneuvered along the road networks expected to be encountered in forward wartime ASPs.



- 4. Analysis of Recommendation:
 - a. The recommendation has merit.
- b. Current doctrine (FM 9-6, Ammunition Service in the Theater of Operations) states: "Caution must be exercised to prevent the movement of stocks on transportation equipment that is not compatible with the environment of the receiving unit. The family of 40-foot container/cargo transporters may not be acceptable in some ASP locations."
- c. The implication is clear: Doctrinally the 40-foot trailer may be acceptable in some ASPs. Nowhere, however, does the doctrine prescribe either the proper equipment or an expedient technique to permit the efficient unstuffing of a two-container shipment.
- 5. Benefits of Implementation: Implementation will eliminate a potential weakness in current doctrine for ammunition service in the theater of operations; and will serve to ensure that responsive supply support can be provided to forward Ammunition Supply Points in a wartime environment.
- 6. Resources Required for Implementation: This is a low-cost recommendation which is already being implemented using available resources.
- 7. Method of Implementation: Agencies involved in the formulation of conventional ammunition combat service support doctrine (TRADOC, LOGC, MMCS) are examining this issue as part of the Combat Service Support Mission Area Analysis (CSSMAA) Study.
- 8. Relationship to Other Studies: This recommendation is directly related to a fundamental objective of the CSSMAA (Munitions Area) Study. That objective is to identify deficiencies in the munitions mission area in terms of operational concepts, doctrine, organization, materiel, and training; and to develop feasible actions to correct those deficiencies.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to recommendation 113B which suggests that throughput to the Corps Storage Area not be accomplished exclusively with 40-foot trailers; but that a proportionate amount of high-usage, high-tonnage items be provided from the ports/theater storage areas on 22.5-ton and 12-ton trailers so that, if required, these trailers could be forwarded directly to an ASP without the need for transfer of cargo, by Corps Storage Area personnel, to a more ASP-compatible vehicle.
- 10. Coordination: ODCSOPS, TRADOC(USAMMCS), and the ALA functional area point of contact for ammunition concur with this memorandum.

TOPIC: THROUGHPUT OF AMMUNITION

RECOMMENDATION NUMBER: 113B

STUDY LOCATION (VOLUME-PAGE): 21-58 to 21-60

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMA)

- 1. Reference Study of Army Logistics-1981, Section 21, pages 21-58 to 21-60.
- 2. Statement of Recommendation: "Develop doctrine, with accompanying management responsibilities, to insure that throughput to Corps Storage Areas (CSAs) include some 22.5-ton or 12-ton trailers carrying high usage items with a high probability of being forwarded to Ammunition Supply Points (ASPs) without download."
- 3. Rationale for Recommendation: This recommendation is based on study observations that:
- a. To respond to resupply requirements of ASPs, it may be necessary for a ${\tt CSA}$ to reconsign incoming stock and expedite it as a throughput shipment to an ${\tt ASP}$.
- b. A CSA would be constrained to throughput only those stocks carried on 32.5-ton or 12-ton trailers, since ASPs are not now equipped to effect the handle containerized shipments arriving on 40-foot contain cargo transporters. (Ref: Recommendation No. 113A).
- c. If all throughput containerized shipments to the CSA were to arrive on 40-foot trailers, the CSA would be required to transload the cargo to an ASP-compatible container/cargo transporter before transshipment.
- 4. Analysis of Recommendation: The recommendation has merit, although it may not be possible to provide the desired mix of trailer types uniformly over time to the CSA.
- 5. Benefits of Implementation: Implementation will eliminate a potential weakness in current doctrine for ammunition service in the theater of operations; and will serve to insure that responsive supply support can be provided to forward Ammunition Supply Points in a wartime environment.

- 6. Resources Required for Implementation: This is a low-cost recommendation which is already being implemented using available resources.
- 7. Method of Implementation: Agencies involved in the formulation of conventional ammunition combat service support doctrine (TRADOC, LOGC, MMCS) are examining this issue as part of the Combat Service Support Mission Area Analysis (CSSMAA) Study.
- 8. Relationship to Other Studies: This recommendation is directly related to a fundamental objective of the CSSMAA (Munitions Area) Study. That objective is to identify deficiencies in the munitions mission area in terms of operational concepts, doctrine, organization, materiel, and training; and to develop feasible actions to correct those deficiencies.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation is related to recommendation 113A which suggests that the doctrinal expectation for throughput of ammunition to ASPs using 40-foot trailers be reevaluated in view of the difficulty anticipated in the movement of these large trailers within the ASP road network, and the inability of the DS company, because of a lack of organic equipment, to efficiently unload two-container shipments.
- 10. Coordination: ODCSOPS, TRADOC(USAMMCS), and the ALA functional area point of contact for ammunition concur with this memorandum.

FUNCTIONAL AREA: Structure

TOPIC: MOTORCYCLES FOR CORPS AMMUNITION OPERATORS AND MANAGERS

RECOMMENDATION NUMBER: 114

STUDY LOCATION (VOLUME-PAGE): 21-45 to 21-49

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQR)

- 1. Reference Study of Army Logistics 1981, Section 21, pages 21-45 to 21-49.
- 2. Statement of Recommendation: "That corps ammunition operators and managers (materiel management centers, ammunition supply points, corps support areas and division ammunition offices) be authorized two motorcycles each to insure critical ammunition needs are expeditiously forwarded in a communications-deficient environment (jamming, terrain masking, inoperable, etc.)."
- 3. Rationale for Recommendation: This recommendation is based on study conclusions that communications between the corps material management center (MMC) and corps ammunition units is vital to insure responsive ammunition support. The study further concluded that critical ammunition needs must be handled outside the Standard Army Ammunition System (SAAS) and that timely communications are vital throughout the ammunition support structure.

4. Analysis of Recommendation:

- a. In its assessment, HQ TRADOC (ATCD-SL) stated that the recommendation is a generally feasible solution for the transmission of ammunition data in a European wartime environment (in addition to existing communications means), but that motorcycles might be identified as host nation support items which US forces would obtain at a specified alert stage.
- b. Preliminary TRADOC estimates for motorcycles are five per forward deployed ammunition battalion, one per ammunition transfer point, and one per corps support command or theater Army area command material management center.
- 5. Benefits of Implementation: The use of motorcycles by corps ammunition operators insures that critical ammunition needs are expeditiously forwarded in a communications-deficient environment. Increasing mobility produces more agile and responsive ammunition support.
- 6. Resources Required for Implementation: After preparation, approval, and application of appropriate requirements documents, a decision must be made in the prioritization process to program funds. A force structure increase, based on acquisition of motorcycles, is undetermined at this writing.

- 7. Method of Implementation: HQ TRADOC is currently preparing a revised Basis of Issue Plan for the motorcycle as messenger and communications vehicle. The BOIP is expected to arrive at HQDA in March 1983.
- 8. Relationship to Other Studies: The Munitions Systems Support Structure (MS³) Study evaluated existing doctrine and organizational structure. The study recommended new concepts and structure to improve munitions support, including improved communications and mobility.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: This recommendation is not related to other recommendations within the study.
- 10. Coordination: ODCSLOG, ODCSRDA, and the ALA functional area point of contact for ammunition concur with this memorandum.

TOPIC: AMMUNITION SUPPORT DOCTRINE

RECOMMENDATION NUMBER: 115

STUDY LOCATION (VOLUME-PAGE): 21-45 to 21-49

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMA)

- 1. Reference Study of Army Logistics 1981, Section 21, pages 21-45 to 21-49.
- 2. Statement of Recommendation: "That ammunition support doctrine for Theater Army Materiel Management Center (MMC) ammunition managers reflect the dated information with which they will be working."

3. Rationale for Recommendation:

- a. This recommendation is based on the study estimation that ammunition logistic data, routinely transmitted from ammunition supply points (ASPs) through each management level (i.e., Corps MMC and Theater Army MMC) via the Standard Army Ammunition System (SAAS) reporting network, can be expected to be between 31 and 51 hours old by the time it is available in useful form to the Theater Army MMC ammunition managers.
- b. Current conventional ammunition support doctrine indicates that approximately 50 percent of an ASP's resupply requirements would be provided by throughput shipments directly from Port (20 percent) and Theater Storage Area (30 percent).
- c. The study challenges whether this is a realistic doctrinal expectation given the dated information the Theater Army MMC ammunition managers, who would direct these throughput shipments, would have to work with.

4. Analysis of Recommendation:

- a. The recommendation has merit, although current doctrine does provide for critical ammunition requirements to be handled outside of SAAS (via radio, telephone or courier).
- b. While the Theater Army MMC may reasonably expect to routinely provide a portion of the high usage, high tonnage munitions (e.g., artillery and tank gun ammo) directly to Corps ASPs in anticipation of need, a reevaluation of

the planned magnitude of such support is appropriate in view of the data processing and transmission times which the Study of Army Logistics estimates wil occur.

- 5. Benefits of Implementation: Implementation could eliminate a potential weakness in current doctrine for ammunition service in the theater of operations; and will serve to ensure that responsive supply support can be provided to forward Ammunition Supply Points in a wartime environment.
- 6. Resource Required for Implementation: This is a low-cost recommendation which is already being implemented using available resources.
- 7. Method of Implementation: Agencies involved in the formulation of conventional ammunition combat service support doctrine (TRADOC, LOGC, MMCS) are examining this issue as part of the Combat Service Support Mission Area Analysis (CSSMAA) Study.
- 8. Relationship to Other Studies: This recommendation is directly related to a fundamental objective of the CSSMAA (Munitions Area) Study. That objective is to identify deficiencies in the munitions mission area in terms of operational concepts, doctrine, organization, material and training; and to develop feasible actions to correct those deficiencies.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is peripherally related to recommendation 114 which suggested Corps ammunition managers be authorized motorcycles to ensure critical ammunition needs could be expeditiously forwarded in a communications deficient environment.
- 10. Coordination: ODCSOPS, TRADOC(USAMMCS), and the ALA functional area point of contact for ammunition concur with this memorandum

TOPIC: REDUCE AMMUNITION PACKAGING STANDARDS

RECOMMENDATION NUMBER: 116

STUDY LOCATION (VOLUME-PAGE): 21-44

PROPONENT OFFICE: HQDA CDCSLOG (DALO-SMP-P)

- 1. Reference Study of Army Logistics 1981, Section 21, page 21-44.
- 2. Statement of Recommendation: "Evaluate Contingency Scenarios for Opportunities to Reduce Packaging Standards."
- 3. Rationale for Recommendation: The study states that during wartime ammunition will be shipped directly from production to a known theater of operations; thus, it will not require packaging for long-term storage or unknown climatic conditions.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing.
- a. The Supply and Maintenance Policy Division, Directorate of Supply and Maintenance, is charged with Staff oversight of packaging policy.
- b. The U.S. Army Armament Research and Development Command (ARRADCOM) has been tasked to perform a study and to develop ammunition packaging standards for contingency scenarios.
- c. Milestones submitted by ARRADCOM indicate that a final report can be published 6 months after receipt of funding for the development effort. Major benefits expected to be derived from new packaging concepts would include:
 - (1) Reduced packing material and labor costs
 - (2) Reduced weight
 - (3) Higher density palletization
 - (4) Easier access to ammunition
 - (5) More rounds per MHE lift
 - (6) Applicability to Rapid Deployment Force needs
 - (7) Reduction in number of vehicles needed for ammunition supply/resupply.
- 5. Benefits of Implementation: Adoption of reduced packaging standards for contingencies will reduce costs and increase ammunition handling efficiency during wartime.

- 6. Resources Required for Implementation:
- a. ARRADCOM estimates that approximately one man-year of effort at total cost of \$80,000 will be required.
- b. Funds will be made available by the U.S. Army Materiel Development and Readiness Command (DARCOM) and the study will begin during the 3rd Quarter FY 82.
- 7. Relationship to Other Studies: None.
- 8. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced nor paced by another recommendation within this study; however, it is a key to success of other recommendations which concern ammunition management.
- 9. Coordination: DARCOM and the ALA point of contact concur.

TOPIC: COMPATIBLE AMMUNITION PACKAGING

RECOMMENDATION NUMBER: 117

STUDY LOCATION (VOLUME-PAGE): 21-43

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-CSM-M)

- a. DALO-PLO memo, 13 Oct 81, subj: Assessment Plan, Study of Army Logistics 1981.
- b. CSM 81-700-28, 18 Nov 81, subj: Study of Army Logistics 1981, Plan of Assessment.
 - c. AR 700-15, 20 Jun 75, subj: Packaging of Materiel.
 - d. AR 700-127, 11 apr 75, subj: Integrated Logistics Support.
- e. DARCOM Report, Oct 77, subj: Ammunition Initiatives Task Force (AITF)Main Report.
- f. TRADOC ROC (Required Operational Capability), 28 Aug 81, subj: Cartridge, 105mm, APFSDS-T, XM833.
 - g. GDCSRDA Draft STOG-81 (Science and Technology Objective Guide).
- h. ARRADCOM Ltr, 3 Nov 81, subj: Packaging Activities in Support of AITF.
- i. USADACS Trip Report, May 81, subj: Ammunition Packaging, Handling and Transportability Technical Assistance Team Visit to USAREUR.
- 2. Statement of Recommendation: "Adopt a system compatibility approach to the development of new ammo packaging." $\ \ \$
- 3. Rationale for Recommendation: The study states that packaging initiatives can provide high payoff in reducing the logistics burden of ammunition supply and improving tactical support.
- 4. Analysis of Recommendation: This recommendation does not require action since it is redundant with specifications in existing Army regulations and with findings of the AITF study which are being implemented. For these reasons, further action and milestone reporting are not required.
- a. This recommendation seeks to improve logistics efficiency and user satisfaction through better ammunition packaging. The proposed system compatibility approach would start with the needs of weapons systems gunners, integrate these with the ammunitions resupply doctrine, and include the end product in weapons systems ROCs.

- b. Existing Army regulations address packaging as an integral part of a system life cycle subject to cost and performance tradeoffs. In addition, this recommendation is redundant with those in a 1977 DARCOM AITF study. Specifically, AITF recommends that user-oriented packaging needs should be defined in requirements documentation for development systems and that a dedicated technology base for ammunition packaging be developed. The AITF recommendations are being implemented in both requirements documents and in the technology base.
- 5. Benefits of Implementation: The benefits from improved ammunition packaging such as rapid access, ease of handling, reduced weight and size, transport compatibility, camouflage, and minimum debris are recognized, and have been incorporated into development programs for propelling charges, 105mm tank ammunition, 2.75-inch rocket, and artillery fuzes.
- 6. Resources Required for Implementation:
- a. While the benefits from improved packaging are acknowledged, it must be noted that packaging requirements, as an integral part of system life cycle development, must compete with other requirements.
- b. The current FY 82 programs include such pure ammunition packaging initiatives as Fire Retardants, One-Step Access Container Construction, and Water Vapor Permeation and Sealing Techniques.
- 7. Method of Implementation: Not applicable.
- 8. Relationship to Other Studies: The findings of Logistics 1981 are redundant with the findings of AITF which highlighted user-oriented packaging needs, and with CASPR (Conventional Ammunition Special Review) by the DAIG which reemphasized the original AITF observations.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is directly related to recommendation #119 which concerns new ammunition packaging which increases the number of rounds handled in one MHE lift. Since recommendation #117 addresses general ammunition packaging and recommendation #119 the more specific suggestion of new ammunition packaging which optimizes the number of rounds/MHE lift, recommendation #117 is the pacer.
- 10. Coordination: ODCSOPS, ODCSLOG, DARCOM, ARRADCOM, and the ALA Functional Area Point of Contact for Conventional Ammo concur.

TOPIC: PACKAGING FOR NBC ENVIRONMENT

RECOMMENDATION NUMBER: 118

STUDY LOCATION (VOLUME-PAGE): 21-43

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-CSS-C)

1. Reference:

- a. Study of Army Logistics 1981, Section 21, page 43
- b. Memorandum, DALO-PLO, 13 October 1981, subject: Assessment Plan, Study of Army Logistics 1981.
- c. CSM 81-700-28, 18 November 1981, subject: Study of Army Logistics 1981, Plan of Assessment.
 - d. Department of the Army Chemical Action Plan, 16 June 1981.
- 2. Statement of Recommendation: "Expeditiously develop packaging that provides NBC protection to ammo and enables ease of decontamination."
- 3. Rationale for Recommendation: The study states that packaging initiatives can provide high payoff in reducing the logistics burden of ammunition supply and improving tactical support.

4. Analysis of Recommendation:

- a. Implementation of this recommendation is ongoing and will continue. The Department of the Army Chemical Action Plan (ACAP) was developed to identify and correct deficiencies in the chemical warfare/chemical-biological defensive posture which have existed for over a decade. This ACAP is the blueprint for all chemical-biological research and development efforts and is reviewed periodically at the Vice Chief of Staff of the Army level. The subject recommendation is encompassed by action D.1 on page 5-A-9 of the ACAP. This action states "Develop protective packaging and storage systems designed for ease of decontamination." To assure visibility of ammunition packaging, action D.1 of the revised ACAP will read, "Develop protective packaging and storage systems designed for ease of decontamination to include protection for ammunition."
- b. The US Army Training and Doctrine Command (TRADOC) is currently staffing a Required Operational Capability (ROC) for an NBC protective cover which will provide protection for all classes of supplies from contamination caused by nuclear fallout and both chemical-biological agents. This cover will provide a significant increase in the protection afforded ammunition from NBC contaminants and will provide the most practical, cost effective means of protecting ammunition from contamination regardless of its palletization or storage

- configuration. US Army Materiel Development and Readiness Command (DARCOM) recommends adoption of these covers for ammunition as well as other classes of supply. The draft ROC projects a requirement for 4,800 covers during the Fiscal Year (FY) 1985-1989 period at a cost of \$19.6 million.
- c. In September 1981, the Army recommended Chemical Resistant Coatings (CARC) to protect vehicles and weapons systems from NBC contamination and assure ease of decontamination. DARCOM has been tasked to develop an implementation plan which will address the economic feasibility of CARC for both developmental and currently fielded items. This implementation plan is due to be completed by 30 June 1982. The results of this study will be reviewed to determine the utility of adopting a CARC for coating ammunition (particularly individual artillery rounds) and ammunition containers. A problem of paint thickness versus mil caliber tolerances must be resolved if CARC is adopted for ammunition.
- 5. Benefits of Implementation: Adoption of NBC protective packaging for ammunition will reduce the logistical burden of decontamination and provide a higher state of ammunition readiness should contamination be present on the battlefield.
- 6. Resources Required for Implementation: Resources for development of the NBC protective cover were identified in the FY 1984-1988 POM. Procurement funds for the NBC protective cover remain to be programed. Resources to implement CARC, if approved for adoption, will compete in POM FY 1985-1989.
- 7. Method of Implementation: Implementation will be monitored during each periodic review of the ACAP.
- 8. Relationship to Other Studies: This recommendation is encompassed by action D.1 on Page 5-A-9 of the ACAP.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not influenced or paced by another recommendation within this study.
- 10. Coordination: ODCSOPS, DARCOM, TRADOC, and the ALA Functional Area Point-of-Contact for Conventional Ammunition concur with this memorandum.

TOPIC: AMMUNITION PACKAGING FOR SINGLE LIFT

RECOMMENDATION NUMBER: 119

STUDY LOCATION (VOLUME-PAGE): 21-43

PROPONENT OFFICE: HQDA ODCSRDA (DAMA-CSM-M)

- a. DALO-PLO memo, 13 Oct 81, subj: Assessment Plan, Study of Army Logistics 1981.
- b. CSM 81-700-28, 18 Nov 81, subj: Study of Army Logistics 1981, Plan of Assessment.
 - c. AR 700-15, 20 Jun 75, subj: Packaging of Materiel.
 - d. AR 700-127, 11 Apr 75, subj: Integrated Logistics Support.
- e. DARCOM Report, Oct 77, subj: Ammunition Initiatives Task Force (AITF)Main Report.
- f. TRADOC ROC (Required Operational Capability), 28 Aug 81, subj: Cartridge, 105mm, APFSDS-T, XM833.
 - g. ODCSRDA Draft STOG-81 (Science and Technology Objective Guide).
- h. ARRADCOM Ltr, 3 Nov 81, subj: Packaging Activities in Support of AITF.
- i. USADACS Trip Report, May 81, subj: Ammunition Packaging, Handling and Transportability Technical Assistance Team Visit to USAREUR.
- 2. Statement of Recommendation: "Investigate new packaging that will increase the number of rounds handled in one MHE-lift."
- 3. Rationale for Recommendation: The study states that packaging initiatives can provide high payoff in reducing the logistics burden of ammunition supply and improving tactical support.
- 4. Analysis of Recommendation: This recommendation does not require action since it is redundant with specifications in existing Army regulations and with findings of the AITF study which are being implemented. For these reasons, further action and milestone reporting are not required.
- a. This recommendation attempts to decrease the logistics burden of storage, handling, and transportation. Supporting this goal are examples of the Israeli Merkava tank and the Armored Forward Area Rearm Vehicle (AFARV), both of which can employ unitized ammunition pallets to facilitate reload.

- b. Currently, Materiel Handling Equipment (MHE) used with munitions in USAREUR range from cranes and fork lifts to manpower. There is no standardized piece of MHE against which such an investigation could be directed. Developmental programs, such as AFARV, include system specific packaging concepts for pallet design and handling.
- c. Packaging is already included as a portion of the weapons system life cycle management in existing Army regulations. In addition, this recommendation is redundant with those in the 1977 DARCOM AITF study where improvements in current packing/palletization were recommended. ARRADCOM reports ongoing research and significant progress in packaging which increases pallet capacity for a given volume.
- 5. Benefits of Implementation: The benefits from improved ammunition packaging such as rapid access, ease of handling, reduced weight and size, transport compatibility, camouflage, and minimum debris are recognized, and have been incorporated into development programs for propelling charges, 105mm tank ammunition, 2.75-inch rocket, and artillery fuzes.
- 6. Resources Required for Implementation: While the benefits from improved packaging which increase the number of rounds handled in one MHE-lift are acknowledged, it must be noted that packaging requirements, as an integral part of system life cycle development, must compete with other requirements.
- 7. Method of Implementation: Not applicable.
- 8. Relationship to Other Studies: The findings of Logistics 1981 are redundant with the findings of AITF which highlighted user-oriented packaging needs, and with CASPR (Conventional Ammunition Special Review) by the DAIG which reemphasized the original AITF observations.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is directly related to recommendation #117 which concerns a system compatibility approach to the development of new ammo packaging. Since recommendation #117 addresses general ammunition packaging and recommendation #119 the more specific suggestion of new ammunition packaging which optimizes the number of rounds/MHE lift, recommendation #117 is the pacer.
- 10. Coordination: ODCSOPS, ODCSLOG, DARCOM, ARRADCOM, and the ALA Functional Area POC for conventional ammo concur.

TOPIC: AMMUNITION CONSUMPTION DATA

RECOMMENDATION NUMBER: 101

STUDY LOCATION (VULUME-PAGE): 21-15 to 21-23

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-RQL)

- 1. Reference: Study of Army Logistics-1981, Section 21, pages 21-15 to 21-23.
- 1. Statement of Recommendation: "Develop and promulgate ammunition consumption data which is consistent."
- 2. Bationale for Recommendation:
- a. This recommendation is based on the Study conclusion that the consistency of ammunition consumption data is of paramount importance to Army planning. The attempt to align "Total Army Analysis 88" and the "Wartime Fequirements for Ammunition, Materiel, and ersonnel, FY 84-88, Europe (P88) study was abandoned because of the resultant delay in meeting critical time dependent requirements.
- b. The Study of Army Logistics found that inconsistencies exist among ammunition rates study results, Total Army Analysis results, and the ammunition rates used within the doctrinal community. Inconsistencies in ammunition requirement projections have caused a planning and an operational dilemma.
- c. Consistent ammunition consumption data is a prerequisite for accurate comhat service support force development.
- 4. Analysis of Recommendation:
- a. Evolving plans to improve consistency of HQDA ammunition rates studies and other HQDA studies using rates data (i.e., Total Army Analysis, OMNIBUS) should ease this problem area.
- b. Attaining consistency with SHAPE Technical Center (STC) NATO stockpile guidance rates will require either the US or STC to change calculation methodologies. Although methodologies differ, considerable similarity exists in consumption rates for many items (except anti-tank munitions).
- c. Achieving consistency between HQDA and TRADOC force development and combat development studies with reduced scale scenario and less-than-theater level forces may be possible only as the Army Model Improvement Program development of a hierarchy of models is achieved.

- d. Consistency with FM 101-10-1 rates may be attainable only with completion of actions relating to recommendation 19, which recommended clarification of ammunition consumption data.
- 5. Benefits of Implementation: Consistent ammunition consumption data aids development of an ammunition unit force structure capable of performing the ammunition mission satisfactorily. Clarification of .mmunition rates data reduces the creation of "local" planning rates developed by the field and improves the Army-wide understanding and credibility of ammunition consumption data.
- 6. Resources Required for Implementation: This is a low-cost recommendation which can be implemented using available resources. HQDA ODCSOPS (DAMO-RQL) sponsors theater ammunition rate studies (except for FM 101-10-1 and SHAPE rates) and provides guidance to USA Concepts Analysis Agency in its ammunition rates development process.
- 7. Method of Implementation: Agencies involved in ammunition rates development (ODCSOPS, Concepts Analysis Agency (CAA), TRADOC, LOGC, STC) must seek, where possible, alignment of ammunition studies. Inconsistent ammunition consumption data must be resolved by means of conferences, data exchanges, and periodic rate updates.
- 8. Relationship to Other Studies: Conventional Ammunition Special Review (CASPR) concluded that the methodology used to determine combat expenditure rates was basically sound, but that the methodology was not generally understood by commanders and staff officers in the field. CASPR recommended that major commands be required to participate with senior officer representation in the rates determination process and that procedures be established to brief major commanders and staffs on the methods of rates determination.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is closely related to and should be combined with recommendatons 19, 19A, and 19B, which suggested clarification of ammunition consumption data and promotion of an awareness and understanding of rates development and use.
- 10. Coordination: ODCSLOG, ODCSRDA, and the ALA functional area point of contact for ammunition concur with this memorandum. USA Concepts Analysis Agency's comments concerning the recommendation and evaluation are at Inclosure 1. Differenct scenarios, timeframes, force deployments, and study assumptions will cause study results and ammunition consumption ates to differ. However, all agencies involved must intensify efforts to clarify ammunition consumption data, to promote an awareness of rates development and use, and to provide accurate data with which to develop ammunition unit force structure.

CSCA-RQR 10 June 1982

MEMORANDUM FOR CHIEF, COMBAT SERVICE SUPPORT DIVISION, ODCSOPS

SUBJECT: Study of Army Logistics-1981, Assessment of Recommendation Number 21

- a. Draft memorandum, DAMO-RQL, undated, subject: Study of Army Logistics-1981, Assessment of Recommendation Number 121 -- INFORMATION MEMORANDUM.
- b. FONECON, 8 June 1982, between MAJ J. Tarpley, DAMO-RQL, and LTC D. Holdsworth, CSCA-RQR, SAB.
- 2. As requested by reference b, the following comments relative to recommendation under 121 (Inclosure 1) are provided:
- a. The statement of recommendation appears to be unattainable. Using consistent rates data and using a common basis for rates determination are not the same thing.
- b. The alignment of the Total Army Analysis (TAA) and the P-study for the same POM period is to be accomplished by using the same scenario, the same deployment schedules, the same Blue and Red forces (to include time-phased equipment densities) and the same high resolution combat sample calibration of the theater model. The very fact that the P-study unconstrains ammunition and, later, materiel, whereas ammunition and materiel remain constrained to program levels for TAA, causes the warfighting results to be different.
- c. Similarly, future calibrations of the theater model for the OMNIBUS studies will, to the extent possible, be accomplished using the P-study high resolution model, COSAGE. Again, however, different scenarios, timeframe, forces, and study assumptions will cause the theater warfighting results to differ. With different deployment schedules and force composition, ammunition consumption rates are expected to differ significantly.
- d. Consistency with FM 101-10-1 rates (paragraph 4d) and reduction of the need to create "local" planning rates by the field (paragraph 5) are two goals that are neither realizable nor desirable. FM 101-10-1 rates pertain to specific type units in specific missions, given the TOE listed in the FM, and are not comparable to the theater-wide rates for set scenarios, force

CSCA-RQR 10 June 1982 SUBJECT: Study of Army Logistics-1981, Assessment of Recommendation Number 121

structures, and time periods. Similarly, "local" planning data, such as the local G3's supply rate determination, are even more strictly defined by the particular unit, mission, and situation. Consequently, the need for the implementation addressed in paragraph 7 of inclosure 1 is questionable.

3. The rationale behind Recommendation Number 121 needs to be reviewed. As appropriate, the recommendation should be changed or better explained such that a more meaningful assessment can be produced.

FUNCTIONAL AREA: Management and Organization

TOPIC: STANDARD ARMY AMMUNITION SYSTEM LEVEL 4 (SAAS-4)

RECOMMENDATION NUMBER: 122

STUDY LOCATION (VOLUME-PAGE): 21-2, 21-71

PROPONENT OFFICE: HQDA ODCSLOG (DALO-SMP-S)

- 1. Reference Study of Army Logistics 1981, Section 21, pages 21-71.
- 2. Statement of Recommendation: "Expedite development and fielding of the Standard Army Ammunition System Level 4 (SAAS-4)."
- 3. Rationale for Recommendation: The study states that the administrative processing at the Ammunition Supply Point (ASP) requires an inordinate amount of time compared to time needed for the actual loading of ammunition.
- 4. Analysis of Recommendation: Implementation of this recommendation is ongoing and will continue through the extension of the SAAS-4.
- a. The Army ammunition community has identified this problem and is currently working on designing, developing, and fielding SAAS-4.
- b. The USA Logistics Center has tasked the US Army Missile and Munitions Center and School (USAMMCS), Redstone Arsenal, Alabama to design SAAS-4.
 - c. The USAMMCS has drafted a set of manual procedures for SAAS-4 to:
 - (1) Standardize the ASP operating procedures.
 - (2) Provide standard reporting procedures to SAAS-3 at the Corps MMC.
- (3) Initiate manual SAAS-4 in conjunction with the fielding of SAAS-3 in October 1982.
- d. The SAAS-4 Mission Element Needs Statement (MENS) has been approved by ASA(IL&FM) 25 December 1981.
- e. An in-process review for Milestone I in the development cycle of SAAS-4 was conducted on 19 January 1982; this will conclude the concept development phase.
- f. The Milestone II IPR is tentatively scheduled for May 1982, concluding the definition/design phase.

- g. System development will begin during 4th Quarter FY 82.
- h. System extension is presently set for 3rd Quarter FY 85; however, ODCSLOG is attempting to expedite this date.
- (1) A Product Manager for SAAS-4 has been nominated to OASA (IL&FM). The PM will closely manage the system milestone events and seek ways to expedite the development progress. This responsibility is included in his charter and will be continually reinforced to him by ODCSLOG personnel during the development cycle.
- (2) The lifecycle events leading to extension have had "soft" dates because of serious resource constraints at LOGC and CSC. ODCSLOG is taking action, as cited in paragraph 6 below, to resolve these constraints. The impact on the planned extension date cited above, however, cannot be determined at this time.

5. Benefits of Implementation:

- a. The standardization of stock record formats worldwide.
- b. SAAS-4 will automatically satisfy the reporting required for input to SAAS Level 3.
- c. Special reports and management data will be provided that are not presently provided due to an inordinate number of man-hours required.
- d. SAAS-4 will reconcile Training Ammunition Management Information System (TAMIS) data, in doing so, it will provide a service to the staff personnel engaged in managing training ammunition.

6. Resources Required for Implementation:

- a. The SAAS-4 development effort is short two civilian spaces at the US Army Logistics Center, and five man-years of effort at the Computer Systems Command Support Group Lee, Fort Lee, VA, for FY 83.
- b. TRADOC and CSC PARRS are being reviewed to assure critical shortfalls such as the foregoing have been addressed. In cases where they have not, evaluation is being made of two methods of addressing these shortfalls. One method is for inclusion of the shortfalls in the MRIS PDIP. The other method is the development of an ARSTAF PDIP.
- c. Since the shortfall will affect SAAS-4 when the system reaches the development stage in 4th Quarter FY 82, some immediate action is required for FY 82. ODCSLOG will ask CSC to impact the reassignment of the necessary resources for SAAS-4 from other ongoing projects and will evaluate these options when received. A high priority unfinanced requirement submission is also being prepared for FY 83.

- d. The Computer Systems Command Support Group Lee will contract the development effort of SAAS-4, but there remains a need for in-house capability to work closely with the contractors.
- 7. Method Implementation: The US Army Logistics Center and the Computer Systems Command have established procedures for implementing SAAS-4.
- 8. Relationship to Other Studies: This recommendation is supported by a series of ammunition related studies as follows: the Missile and Munitions Evaluation 78 (MAME-78); the Munitions Systems Support Structure (MS3) Study; the Combat to Support Balance Study (CSBS); the Ammunition Initiatives Task Force (AITF); and the Conventional Ammunition Special Program Review (CASPR); all these studies point to the need for an automated ammunition system at the ASP level.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is one of three involved in reducing processing time in the ASP. The other two were to incorporate onboard MHE on Resupply Vehicles and to evaluate the impact of various convoy sizes upon convoy assembly times. The SAAS-4 recommendation addresses the main problem area of the ASP, which is too much time spent in administrative processing by customers; its implementation will have the most impact on reducing processing time in the ASP.
- 10. Coordination: ODCSOPS, ODCSRDA, TRADOC/USALOGC, and USAMMCS concur.

FUNCTIONAL AREA: Doctrine

TOPIC: CONVOY SIZES

RECOMMENDATION NUMBER: 123

STUDY LOCATION (`LUME-PAGE): 21-71

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLF)

- a. Study of Army Logistics 1981, Section 21, pages 67-71.
- b. Letter, HQDA, DALO-PLF, 28 Dec 81, SAB.
- 2. Statement of Recommendation: "Evaluate impact of various convoy sizes upon convoy assembly times. (Balance results against security, command and control considerations to obtain range of recommended convoy sizes.) Promulgate results in Army doctrinal publications."
- 3. Rationale for Recommendation:
- a. Convoy size is a factor in processing time at ammunition supply points.
- b. A reduction of convoy size would speed ASP processing time and reduce vulnerability of convoy vehicles stopped at ASP.
- 4. Analysis of Recommendation:
- a. The MS3 doctrine includes a requirement for frequent, smaller, daily convoys. Thus, there already exists a doctrinal base for smaller convoys.
- b. Doctrine does not define a specific range of recommended convoy size.
- c. It would be useful to have a doctrinally recommended range of convoy size.
- 5. Benefits of Recommendation: Development and promurgation of a doctrine concerning convoy sizes would serve as a guide for transportation elements.
- 6. Resources Required for Implementation: None.

- 7. Method of Implementation: TRADOC is determining the impact of various convoy sizes upon assembly time as part of the CSS MAA scheduled for completion in December 1982. If it is possible to obtain a meaningful range of recommended convoy sizes, that information will be published in doctrinal literature.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is related to Recommendation Numbers 120 and 122.
- 10. Coordination: ODCSOPS, TRADOC, and the ALA functional area point of contact for ammunition concur.

FUNCTIONAL AREA: Management and Organization

TOPIC: WATER

RECOMMENDATION NUMBER: 124

STUDY LOCATION (VOLUME-PAGE): 22-14

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSE-W)

- a. Study of Army Logistics 1981, Section 22, pages 1-14.
- b. TRADOC Pamphlet 525-11, "Near Term Water Resources Management," 15 June 1981.
- 2. Statement of Recommendation: "Continue refinement of water planning factors and procurement of water equipment."
- 3. Rationale for Recommendation:
- a. The Army was appointed DOD Executive Agent for land based water resources and the ODCSLOG is the Army proponent.
- b. The Services currently have limited capability to provide water support to the RDJTF in a hot, arid environment. Production, purification, storage, distribution, and cooling equipment is being procured to establish water support capability for the RDJTF.
- c. Water planning factors are the base for estimating water requirements and developing the equipment required for the water support system.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. Water planning factors to meet minimum essential requirements for support of the near term RDJTF were developed by the Services in 1980 and were published in TRADOC Pamphlet 525-11. The USA Logistics Center and QM School are currently developing factors for long term force structure and equipment requirements. Refinement of these factors for long term force structure and equipment requirements. Refinement of these factors will be achieved through development of improved conservation measures, recycle/reuse procedures, and water using equipment.

- b. The FY 81 Supplemental (\$48M Army, \$4M Air Force, and \$8M USMC) and FY 82 Budget (\$61.6M Army, \$10.6M Air Force, and \$27M USMC) provide minimum essential support for the near term RDJTF. The FY 83-87 program is designed to establish water support for the expanded RDJTF. (Approximately \$280M Army, \$15M Air Force, and \$45M USMC).
- c. Equipment contracts include Well Drilling Rigs, Reverse Osmosis Water Purification Units (ROWPU), Tactical Water Distribution Systems, Collapsible Storage Systems, Forward Area Water Point Supply Systems, various small containers, tanks for mounting on semi-trailers, and Small Mobile Chillers.
- d. A water training and support program is planned to begin in October 1982 at the NTC using the new equipment.
- e. New 600 GPH ROWPUs, Small Mobile Chillers, and Collapsible Storage Tanks were successfully used in Egypt and Somalia during Exercise BRIGHT STAR 82. New equipment will be used in future exercises when appropriate.
- 5. Benefits of Implementation: Establishment of the water support system will eliminate water as a constraint to the RDJTF in a hot, arid environment.
- 6. Resources Required for Implementation:
- a. The Army Energy Office Water Management Team is authorized one military and one civilian Staff Officer.
- b. This recommendation is being fully implemented using available resources.
 - c. Long term force structure requirements are currently being developed.
- 7. Method of Implementation: Office is already established within the HQDA TDA. Funds are provided through appropriations which support the Army Staff.
- 8. Relationship to Other Studies: Requirements were verified by the Report of the Defense Science Board Task Force on Water Support to US Forces in an Arid Environment, October 1981.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is not directly related to other recommendations within this study.
- 10. Coordination: ODCSOPS, ODCSRDA, OCE, OTSG, FORSCOM, DARCOM, TRADOC, RDJTF, Air Force, and Marine Corps concur.

FUNCTIONAL AREA: Management and Organization.

TOPIC: COMBAT ARMS DETAIL/RECORDING OF TOE POSITIONS

RECOMMENDATION NUMBER: 125

STUDY LOCATION (VOLUME-PAGE): 25-203

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MPM-OF)

- 1. Reference Study of Army Logistics 1981, Section 25.
- 2. Statement of the Recommendation: "The reinstatement of the Combat Arms Detail and recoding of selected TOE positions to combat service support positions will enlarge the accession base for combat service support officers and reduce combat arms requirements for "late entry" accession into logistics specialty codes."
- 3. Rationale for Recommendation: Stated in paragraph 2.
- 4. Status of Analysis of Recommendation: Initial staffing of recommendations pertaining to both the combat arms detail and the recoding of positions is complete. Final staffing of a recommendation regarding the Combat Arms Detail has been completed with a decision memorandum for the CSA currently receiving final review. When the final decision on the combat arms detail is made, the issue of recoding positions will again be addressed in the light of field comments.

FUNCTIONAL AREA: Structure

TOPIC: WARRANT OFFICER AUTHORIZATIONS

RECOMMENDATION NUMBER: 126

STUDY LOCATION (VOLUME-PAGE): 25-118

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MPD-W)

1. Purpose: To obtain Director of the Army Staff approval to not adopt subject recommendation.

2. Discussion:

a. Reference:

- (1) Study of Army Logistics-1981 -- Page 25-118.
- (2) USACAC message '161523Z Nov 81, subject: Study of Army Logistics-81.
 - (3) Strength Report, DAPCX-375, dated 11 Mar 82.
- b. Statement of Recommendation: "Raise Warrant Officer (WO) authorizations to one per battalion to improve technical quality of logistics force structure."
- c. Rationale of Recommendation: The study states that WO provide technical expertise and experience, that missile and ADA systems have increased WO support in the past while logistics WO strength has remained relatively constant, that WO are procured from the enlisted ranks and carry needed experience to the officer corps and that increased WO strength in the logistics system will result in improved supply discipline, accountability and readiness.

d. Analysis of Recommendation:

- (1) In FY 82 there are 972 supply WO authorized. By FY 87 this authorization will increase to 1065. Thus, the Army authorization system is increasing support of the logistics system.
- (2) To support the above authorization increase for WO, approximately 150 NCOs per year will have to be taken from the enlisted ranks. Any further increase in WO authorizat in will cause a corresponding demand on the NCO population.



- (3) Reference 2a(3) shows that the enlisted MOS from which supply WO are appointed are at 94 percent of authorization and cannot support an increased requirement.
 - (4) Warrant Officers are appointed from the best of the NCO ranks.
- (5) An increase in WO requirements would aggravate the shortage of and reduce the quality in the logistics NCO.
- (6) There will be no increase in experience or expertise because the WO would be appointed from the NCO population they replace. The WO would be doing an NCO job.
- (7) The study discussion concerning missile and ADA warrants is not relevant because the strength increase in those fields was caused by an increased number of systems/units and not an increased ratio of WO per unit.
- (8) Reference 2a(2) accurately states the problem. "... cannot substantiate, since actual objective is to simplify the unit supply system, not augment manpower to accomplish supply actions under the current system."
- (9) Warrant officer strength is within overall officer strength, and trade-offs in other officer spaces would be required if warrant authorizations were increased.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics-1981: None.
 - g. QM proponent concurs with this memorandum.
- 3. Recommendation: Do not adopt the proposal to increase Warrant Officer authorizations.

FUNCTIONAL AREA: Training

TOPIC: RESERVE COMPONENT TRAINING

RECOMMENDATION NUMBERS: 127, 127 A, B, C

STUDY LOCATION (VOLUME-PAGE): 25-203

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRU)

- a. Study of Army Logistics 1981, Section 25, pgs 25-203.
- b. The Army CAPSTONE Program, FY 82, 1 Oct 81 (S).
- c. AR 350-35, New Equipment Training, 1 Dec 81.
- d. AR 350-9, Reserve Component Overseas Deployment Training with Active Component Commands, 1 Oct 81.
- 2. Statement of Recommendations: "Improve Reserve Component Training by:
 - a. Providing new equipment training.
 - b. Providing two-week training opportunities to fit Reserve window.
 - c. Expanding the Affiliation Program."
- 3. Rationale for Recommendations: The Study states that the bulk of the Army's maintenance units are in the Reserves. RC units have the bulk of the Combat Service Support (CSS) Mobilization Mission under the Total Army Concept, and:
 - a. RC units have limited access to new equipment training.
- b. There is a need to tailor training programs to fit the RC unit "two-week window."
- c. The Affiliation Program affords service support units realistic training opportunities.
- 4. Analysis of Recommendations: Implementation of these recommendations is ongoing.

- a. New Equipment Training (NET) applies both to the Active and the Reserve Components (ref 1c). The Training Directorate, ODCSOPS, is rewriting this regulation to cover both training in how to operate and maintain new systems, and how to shoot and employ them. The Army Training Support Center (ATSC) is developing concepts for training Reserve Component maintenance personnel using as a vehicle the M1 Abrams Tank maintenance requirements. A pilot program to the Ordnance school, which provides equipment and facilities for training of RC personnel, with instruction done by RC units, is being studied for use by other facilities.
- b. Tailoring training programs to get the RC units "two-week training windows" is the thrust of a series of accomplishments in the area of RC training through CAPSTONE association. The RC Overseas Deployment Training Program trains early deploying units in an overseas environment. This gives maintenance units, for example, an opportunity for hands-on training alongside the Active Component in maintenance of new equipment not yet in RC inventories. RC JTX participation gives RC units participation in scheduled exercises. Numerous RC units train alongside their AC affiliated unit. These programs increased RC unit participation for FY 82, and will undergo a planned expansion annually.
- c. The Affiliation Program has provided for planning, equipping and training support of selected RC units by AC Divisions in support of NATO contingencies since FY 74. This program has expanded from 26 battalions in that year to 101 battalions, 202 companies/detachments for FY 82, and will add another 200 units in FY 83. Expansion progress is geared to CAPSTONE Program development.
- 5. Benefits of Implementation: RC CSS units receive realistic mission-related training as covered in paragraph 4 above.
- 6. Resources Required for Implementation: Undetermined.
- 7. Method of Implementation: As reflected in paragraph 4 above.
- 8. Relationship to Other Studies: NA.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: These recommendations are not influenced or paced by another recommendation within this study.
- 10. Coordination: DCSLOG (DALO-RMP-M) TRADOC (ATTG-O), FORSCOM (AFOP-TRM), Army Training Support Center (ATSC-TDS) concur.

FUNCTIONAL AREA: Training

TOPIC: SKILL LEVEL 3/4 COURSES

RECOMMENDATION NUMBERS: 129, 129 A

STUDY LOCATION (VOLUME-PAGE): 25-202

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-TRI)

- 1. Reference Study of Army Logistics 1981, Section 25, page 202.
- 2. Statement of Recommendation: "Provide additional skill level 3 and skill level 4 courses especially for reclassification action personnel."
- 3. Rationale for Recommendation: Total reclassification actions in FY 80 of personnel into logistics MOS's were 4,879.
- 4. Analysis of Recommendation: Action on recommendation is ongoing.
- a. Appropriate Skill Level Training: The Individual Collective Training Plan (ICTP) and Individual Training Plan Proposal (ITPP) have identified skill Level 2/3 training requirements. Service school proponents are developing additional logistics skill Level 2/3 courses as shown at TAB A. In addition, TRADOC's recently completed Primary/Basic Technical Courses (PTC/BTC) initiative has made PTC/BTC's an item of high priority.
- b. Reclassification Training: AR 611-201 "Enlisted Career Management Fields and Military Occupational Specialties" and AR 600-200 "Enlisted Personnel Management System (EPMS)" provide policy and guidance in the reclassification and training of soldiers. With a few exceptions, the majority of reclassification training is accomplished through OJT. DA and TRADOC are working to establish a migration/reclassification training program for NCO's at all skill levels.
- 5. Benefit of Implementation: Full start-up of programed PTC/BTC courses and the development/establishment of a migration/reclassification training program will provide the Army with better qualified and trained NCO's.

6. Resources Required for Implementation: Resources for PTC/BTC have been provided beginning FY 82. Identified civilian requirements have not been provided due to civilian end strength reductions.

	FY 82	FY 83	FY 84	FY 85	FY 86
OMA	\$3.5M	\$6.1M	\$5.7M	\$5.9M	\$3.5M
MIL ES	236	443	442	प्रम्	443
CIV ES	0	0	0	0	0

Resources to support total Army migration/reclassification training (\$7.2M, 135 MIL ES, 43 CIV ES) were included in the FY 84-88 POM development. However, due to manpower restrictions this initiative was not funded.

- 7. Method of Implementation: HQDA (DAMO-TR) and HQ TRADOC (ATTG-N) will coordinate the start of the additional skill level 2/3 PTC/BTC logistic courses. They will work closely with HQDA, ODCSPER and MOS proponents to establish appropriate reclassification training for NCO's in lieu of OJT as the primary reclassification retraining method. Additionally, certification of troop schools for NCO training, as recently done in USAREUR, is being pursued by TRADOC in cooperation with MACOM's to provide expanded training opportunities.
- 8. Relationship to Other Studies: Past findings by the Army Audit Agency on NCO training and TRADOC's internal skill level 2/3 PTC/BTC initiative support the Army Logistics 81 findings.
- 9. Relationship to Other Recommendations Within the Study of Army Logistics 1981: This recommendation is not influenced by any other recommendation within the study.
- 10. TRADOC (ATTG-N) and ODCSLOG (DALO-RMP-M) concur.

Projected Skill Level 2/3 PTC/BTC Training

FY 83

PTC		BTC
63J20 63B20 63S20 E20 45E20 12F30 51H30		66x30 66u30 64c 67H30 67T20 68H30 76Y30
	FY 84	
	PTC	
66G20 66H20 66N20 66T20 66Y20 66V20		63Y20 63T20 45T20 52C20 52D20 52F20
	FY 84/85	
	BTC	
43E20 57E30 76V30 76W30 94B30		43M30 57F30 76P30 76X30 92C30

FUNCTIONAL AREA: Management and Organization

TOPIC: ENLISTED PROMOTION OPPORTUNITIES

RECOMMENDATION NUMBER: 129B

STUDY LOCATION (VOLUME-PAGE): 25-202

PROPONENT OFFICE: HQDA ODCSPER (DAPE-MPD-CD)

1. Purpose: To obtain Director of the Army Staff approval not to adopt subject recommendation.

2. Discussion:

- a. Reference Study of Army Logistics 1981 page 202.
- b. Statement of Recommendation: "Broaden opportunities for enlisted technicians to be promoted to E9 within MOS."
- c. Rationale for Recommendation: Career progression in most logistics MOS follows a pattern which necessitates a change in MOS and assumption of supervisory responsibilities to progress beyond E5. The development of the systems mechanic concept for new Army weapon systems will allow a soldier to become technically proficient in a particular system and stay in his MOS to grade E9.

d. Analysis of Recommendation:

- (1) Use of systems mechanics for new systems is not at issue and is being implemented up through grade E8. However, at E9, the NCO becomes the supervisor in maintenance activities which work on multiple types of systems. To retain the same MOS held at E8 would belie the nature of the job. To inflate the grade structure permitting E9 at lower levels would not address the key issue. That is, a single dimension (rank) does not adequately support development and retention of both competent technicians and competent leaders.
- (a) The recommendation relies on rank to describe two dimensions of performance: level of responsibility and level of competence.
- (b) Currently, pay, recognition, and status are linked to a single factor (rank/pay grade). Thus, "success" is achieved by rising to higher levels of responsibility; no such incentives promote development and maintenance of competence.
- (2) A new way of doing business is needed and is under investigation. In cooperation with SSC-NCR and TRADOC, we are developing a pilot program to assess the viability of a two dimensional grade/pay system similar to the one at Tab A. Such a system would recognize and compensate for increases in either competence or responsibility or both.

- e. Relationship to Other Studies: The pilot program, "Transition to a More Competent Force," addresses problems surfaced in the Study of Army Logistics through evaluation of a two dimensional grade/pay structure.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
 - g. Coordination: SSC-NCR concurs with this memorandum.

3. Recommendation:

- a. Do not adopt the study recommendation to broaden opportunities for enlisted technicians to be promoted to E9 within MOS.
 - b. Continue to pursue evaluation of a two dimensional grade/pay system.

NOTIONAL CMF STRUCTURE BASED ON COMPETENCE

15-30 Years (15 Years)	11-27 Years (16 Years)	7-24 Years (17 Years)	3-20 Years (17 Years)	3 Years (up or out) TIS TIG	
3yr	•				CL5 CL6 CL7 CL8 CL9 CL10 CL11 CL12 CL13 CL14
3yr	3yr				CL13
2yr	2yr	2yr			CL12
2yr	2yr	2yr			CL11
- 2yr 2yr 3yr 3yr	- 2yr 2yr 2yr 2yr 3yr	- 2yr 2yr 2yr 2yr 2yr 2yr	2yr		CL10
,	2yr	2yr	2yr		CL9
ı	2yr	2yr	2yr		CL8
	,	2yr	2yr		CL7
	l	2yr	2yr		CL6
		'	2yr 2yr 2yr 2yr 2yr		CL5
		•	2yr		CL4
			1	1yr	CL3
				1yr	CL2 CL3 CL
				SL1 lyr	CL1
SL5	SL4	SL3	SL2	SL1	

Competency Level: To do and Teach

FUNCTIONAL AREA: Management and Organization

TOPIC: PRODUCTIVITY/MANAGEMENT INITIATIVES

RECOMMENDATION NUMBER: 130

STUDY LOCATION (VOLUME-PAGE): 14-338

PROPOMENT OFFICE: HQDA ODCSRDA (DAMA-PPM-A)

- a. Study of Army Logistics 1981, Section 14, pages 114-137, 338-39.
- b. Study of Army Logistics 1981, Assessment of Recommendation Number 290, 15 Jan 82.
- c. Memorandum for CSA, DAPE-MBA, subject: HQ DARCOM Reorganization DECISION MEMORANDUM, 15 May 81.
- d. Logistics Applications of Automated Marking and Reading Symbols (LOGMARS) Executive Summary and Master Plan FY 82-85 (Draft), 2 Apr 82.
- 2. Statement of Recommendation: "That DARCOM continue productivity and management initiatives."
- 3. Rationale for Recommendation: The study states that the workload within DARCOM is projected to increase because of force modernization and increasing materiel sophistication. During this same period the manpower available to DARCOM is projected to remain relatively constant. Management and productivity initiatives are underway in DARCOM to control the developing workload-manpower imbalance. The study recommends that these initiatives continue to be implemented.
- 4. Analysis of Recommendation: Implementation of recommendation is ongoing and will continue.
- a. There are three productivity improvements addressed in this portion of the study.
- (1) Resource Self-Help Affordability Planning Effort (RESHAPE) is a DARCOM Productivity Improvement Plan designed to offset the shortfall between the DARCOM baseline manpower requirements and the current peacetime authorizations. RESHAPE was briefed to the Chief of Staff of the Army (CSA) and the Army Staff Council (ASC). The RESHAPE concept, implementation plan, and requirements were accepted and supported by the CSA with a resulting direction that other MACOMs implement similar actions.
- (2) The Procurement Automated Data and Document System (PADDS) is being implemented at the five DARCOM MSCs included in the original project scope. Productivity improvements are meeting or exceeding original expectations.

- (3) On 1 Sep 81, the OSD Joint Steering Group (JSG) published its final report on the Logistics Applications of Automated Marking and Reading Symbols (LOGMARS). LOGMARS is a DOD program to utilize bar codes and scanning devices to enter information from packages and forms into automated logistics systems. OSD encouraged each component to proceed with implementation based on individual priorities and availability of funds. Army was appointed as executive agent for continued implementation. The Assistant Secretary of the Army (IL&FM) further appointed ODCSLOG (DALO-SMP-S) as the office responsible for LOGMARS project initiation and direction. DARCOM is the overall Army LOGMARS implementor with responsibility for milestone planning, budget projection and disbursements, and technical advice. During FY 32-85 about 250 individual tentative applications in twelve project areas have been identified within the Army.
- b. The post-AMARC Reviews have been accomplished. With the exception of two reviews which are under active consideration by DARCOM management, implementation is complete. Indications to date suggest that the improvements noted in the study are indeed valid. DARCOM will continue its command level management responsibility of reviewing changing workload, resources, and organization on a periodic basis.
- c. Headquarters DARCOM realignment was approved by the CSA on 27 May 81. The new TDA was adopted on 15 Oct 81. Action to fill positions to enable the new organization to become fully operational is underway.
- d. The Program Management Control System (PMCS), formerly called the Program Cost Control System (PCCS), is being implemented. The PMCS was addressed in recommendation number 29C, included in the January 1982 Assessment Update.
- e. The goals of the DARCOM Long Range RDA Plan (LRRDAP) are entirely consistent with and complementary to the Department of the Army LRRDAP. Active coordination is being maintained between ODCSRDA and DARCOM planners. Successful attainment of these goals is expected to have substantial positive impact upon future RDA initiatives. Actions to achieve the goals is continuing.
- 5. Benefits of Implementation: The stated initiatives afford measured achievable solutions to redress the projected imbalance in workload manpower within DARCOM.
- 6. Resources Required for Implementation:
- a. RESHAPE Program is a management concept which has been used in all areas in DARCOM. The resources to support the program are identified within DARCOM core and base (financed), financed RESHAPE (PDIP 6A3A), unfinanced RESHAPE (PDIP 6A4A), and other unfinanced PDIPs. The other unfinanced areas include such programs as Quick Return on Investment Programs, Productive Investment Fund, and Productive Enhancing Capital Investment. The funds displayed in PDIP 6A4A are only a portion of the total program. However, failure to fund PDIP 6A4A will eviscerate the credibility of the program; this will prevent DARCOM from gaining the additional manyears which will be generated from this PDIP, as well as causing a ripple effect in the program base.

- b. The initial PADDS at the five Readiness Commands included in the original project scope have been resourced. As the systems mature, refinements or expansion could require further funding support. DARCOM is examining the introduction of PADDS at its RDTE commands and for base operations applications at its installations. As requirements for these future applications are solidified, resourcing needs will be identified.
- c. ODCSLOG plans to provide \$1.0M in FY 82 funds for various LOGMARS applications within the Army. OSD has approved \$16.4M under the DOD Productivity Investment Fund Program for the FY 82-85 period. As cost-effective LOGMARS applications are identified, funding requirements will be expanded. ODCSLOG has identified current known resource requirements in PDIP 4S3F.
- d. DARCOM has funded the Post-AMARC Reviews and follow-on implementation actions within available resources.
- e. The ${\tt Headquarters}$ DARCOM realignment can be fully implemented within resources provided.
- f. PMCS is addressed in recommendation number 29C. Funds for implementation are provided through appropriations which support DARCOM and the Army Staff.
 - g. DARCOM is funding its LRRDAP within available resources.
- 7. Method of Implementation: Recommendation is being implemented through numerous DARCOM management initiatives. Implementation is well underway for all supporting projects to the basic recommendation.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: The implementation of PMCS is also contained in recommendation 29C. The remaining supporting initiatives to the recommendation are not influenced or paced by another recommendation.
- 10. Coordination: HQ DARCOM (DRCDRM, DRCPP-SO, DRCDM, DRCDMD-ST), OASA(RDA), and ODCSLOG (DALO-SMP-S) concur.

TOPIC: USE OF CONTAINER SYSTEMS

RECOMMENDATION NUMBER: 131

STUDY LOCATION (VOLUME-PAGE): 18-126

PROPONENT OFFICE: HQDA ODCSLOG (DALO-TSP-C)

- 1. Reference Study of Army Logistics 1981, Section 18, pages 114-124.
- 2. Statement of Recommendation: "Support exploitation of container systems in wartime.
- 3. Rationale for Recommendation: The Army has historically relied upon the commercial maritime industry's breakbulk capability to move unit and resupply requirements. The commercial fleet has changed, moving away from slow, labor intensive breakbulk ships to faster, more economical container ships. This change in sealift composition has dictated the Army develop the capability to handle large numbers of containers.
- 4. Analysis of Recommendation:
 - a. Implementation of the recommendation is ongoing and will continue.
- b. Doctrine for theater containerization procedures has been developed and published in FM 51-11, Container Movement and Handling in the Theater of Operations.
- c. CHE, MHE, and container transport equipment have been deployed and are being fielded. The 50k rough terrain container handler, 4k low-mast forklift, and 16k mobile ramp are being fielded to units giving them the capability to ground and/or unsturf containers. The M871 and M872 semi-trailers, both of which have a dual container/breakbulk capability, are being fielded to transportation units.
- d. Container control systems have been developed and are being enhanced. The Military Traffic Management Command (MTMC) is developing a systems proposal for management of intermodal containers worldwide which will provide visibility and control of containers from initial booking to consignment in theater and return. This proposed system will interface with existing container control systems such as Standard Port System and DA Movements Management System, both of which are being enhanced.
- e. CONUS port and depot facilities are being improved to handle an increasing number of containers. An example is the facility enhancement at Military Ocean Terminal-Sunnypoint, NC, which will give them a 1000 container a day outload capacity by end FY 82.

- f. DA has developed and implemented a Containerized Ammunition Distribution System (CADS), an integrated source to user system for the movement of ammunition.
- g. To enhance readiness, MTMC established the Contingency Response (CORE) program, a joint Government-industry program which, among other things, will give DOD priority allocation and use of containers to meet contingency requirements.
- h. A shortfall that exists in the Army containerization program is the lack of forward stationed units having container handling equipment both in Korea and in Europe. For Europe, this shortfall is addressed through the prepositioning of equipment in POMCUS and through the development of host nation support agreements. In the case of Korea, reliance will continue for the near term on breakbulk, roll-on/roll-off shipping to meet their requirements, with longer term container facility improvements being made by the ROK Government.
- 5. Benefits of Implementation: Implementation of this recommendation will give the Army the ability to maximize utilization of the commercial maritime fleet in meeting wartime unit and resupply movement requirements.
- 6. Resources Required for Implementation: The resourcing of this wide-ranging recommendation is ongoing and continues to be programed for the out years. Various CSS PDIPs, together with TAA 88 PDIPs, have been developed outlining resource requirements to further enhance the Army's container capability, such as PDIP 354A, container control systems, PDIP DB4F, TAA 88 POMCUS fill, and A418 CHE/MHE to USAR units.
- 7. Method of Implementation: This recommendation is being implemented through various PD MTOE changes, negotiation of host nation support agreements, and publication and refinement of Army containerization doctrine.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: This recommendation is influenced but not paced by recommendations number 26 and 135. Those recommendations pertain to the projection of long-range containerization guidance and the use of that guidance in establishing a goal for developing container capability. This memorandum discusses current, ongoing container actions giving the Army the ability to utilize containers in wartime.
- 10. Coordination: ODCSOPS, DARCOM, MTMC, and the ALA functional area point of contact concur.

TOPIC: CONTAINERS

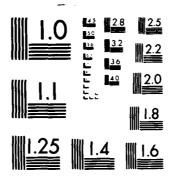
RECOMMENDATION NUMBERS: 132, 133, and 134

STUDY LOCATION (VOLUME-PAGE): 21-55 to 21-57

PROPONENT OFFICE: HODA ODCSOPS (DAMO-RQR)

- 1. Reference Study of Army Logistics 1981, Section 21, pages 55-57
- 2. Statement of Recommendations:
- a. Number 132, "Camouflage-paint containers prior to introduction to the theater of operations."
- b. Number 133, "Investigate the radar signature of containers in a storage configuration."
- c. Number 134, "Determine which storage configuration and techniques enhance detection probabilities."
- 3. Rationale for Recommendations: The study concluded that the physical characteristics of ammunition containers increase their detectability and vulnerability while in ammunition storage areas. To remedy this situation, the recommendations would have all containers prepainted dependent on scenario, IR reflective, chemical agent resistant, and be placed into a prearranged storage pattern once they arrive overseas.
- 4. Analysis of Recommendations: Resolution of the question to implement the recommendations is presently awaiting the completion of a formal study being conducted by TRADOC/Army Logistics Center. A preliminary investigation within DARCOM/DA has revealed widely divergent viewpoints based mainly on strategic/tactical necessity versus practical affordability and ease of execution. Issues requiring consideration include the following:
- a. Over 90 percent of the MILVANS that will be v ed during the first 180 days of a major conflict are commercially owned. If, therefore, painting would have to commence at the start of hostilities, would this cause an unacceptable delay in getting them loaded?
- b. Camouflage painting requirements are driven by the theater to be supported. What is the risk of prepainting?
- c. Ammunition storage areas, especially at arrival ports, are restricted by size and availability of handling equipment. Storage configurations to reduc detection may be infeasible from the standpoint of execution.

AD-A128 153 ASSESSMENT OF THE STUDY OF ARMY LOGISTICS 1981 VOLUME IT ANALYSIS OF RECOMMENDATIONS(U) DEPUTY CHIEF OF STAFF FOR LOGISTICS (ARMY) WASHINGTON DC FEB 83 F/G 15/5 NL



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

- d. Are camouflage nets insufficient for survivability vis-a-vis probability of detection?
- e. Would commercial containers have a better chance of survivability due to the nondescript nature of their contents?
- 5. Benefits of Implementation: The benefits of implementation will be rigorously defined as part of the ongoing study.
- 6. Resources Required for Implementation: Affordability considerations will be examined as part of the ongoing study.
- 7. Method of Implementation: To be determined.
- 8. Relationship to Other Studies: There are ongoing research efforts to develop camouflage paint that will not absorb chemical agents to the degree of our present generation of paints. This parallel effort and subsequent findings will be considered in the ongoing study.
- 9. Relationship to Other Recommendations within the Study of Army Logistics -1981: Although there are logistics storage, handling, and transportation interrelationships, the direct impact of implementing these recommendations are unique to the issue of ammunition survivability in storage locations.
- 10. Coordination: ODCSOPS, ODCSLOG, DARCOM, and TRADOC are participating in the evaluation which is anticipated to be concluded by 1 Aug 82. Findings will be forwarded by separate correspondence.

BACKGROUND: US Army Missile/Munitions Center and School (USAMMCS) in Huntsville, Alabama will conduct the field study.

FACTS: USAMMCS has recognized that MAA effort has not addressed vulnerability problems associated with containers in a storage configuration. The problem, from an assessment standpoint, is that there is a lack of vulnerability data available for ammunition resupply activities, and this has hindered effective supportability evaluations from being conducted in a threat environment. As a result, USAMMCS has implemented a follow-on effort under CSSMAA to conduct a vulnerability assessment under the provisions of AR 5-5, Study Category 4. A Statement of Work has been prepared and field study has been planned for this coming summer.

FUNCTIONAL AREA: Structure

TOPIC: COMPO-4 UNITS

RECOMMENDATION NUMBER: 136

STUDY LOCATION (VOLUME-PAGE): 4-32 through 4-54

PROPONENT OFFICE: HQDA ODCSOPS (DAMO-FDF)

1. Purpose. To obtain Director of the Army Staff approval to adopt subject recommendation as modified herein.

2. Discussion:

- a. Reference Study of Army Logistics 1981 Section 4, pages 32-54.
- b. Statement of Recommendation: "That COMPO 4 units be included in LOGSACS and AAO Computations, thereby institutionalizing the 'real' requirements."
- c. Rationale for Recommendation: The study states that the current method of computing AAO understates the true equipment requirements.
 - d. Analysis of Recommendation:
 - (1) Reference 2a was the basis for this recommendation.
 - (2) Prior to 1975, AAO Computations included COMPO 4 units.
- (3) In 1975, Director, PA&E, ODCSOPS, and ODCSRDA jointly decided not to include COMPO 4 in AAO based upon the fact that the units could not be manned when required in the POM scenario.
- (4) This view of COMPO 4 persisted until just recently for the following reasons:
- (a) Army budgets have not fully satisfied the existing AAO, which does not include COMPO 4 units.
 - (b) A larger AAO may create a negative congressional reaction.
- (c) During mobilization, not all COMPO 4 units would be formed due to resource constraints and shifting priorities. To include all COMPO 4 in AAO would tend to overstate requirements.

- (5) Over the past year, ODCSOPS has developed a concept plan which would change the focus on COMPO 4. This concept strips the total unresourced force requirement to a minimal level and divides it into two categories, COMPO 4A and 4B, which will be recommended for resourcing in the POM. COMPO 4A equipment and the military equipment for COMPO 4B would be included in the LOGSACS as the study recommendation indicates.
- (6) To maintain visibility of the unresourced COMPO 4 equipment requirements, a separate LOGSACS product can be developed.
 - e. Relationship to Other Studies: None.
- f. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- g. ODCSRDA, PA&E, ODCSLOG, ODCSPER, and the ALA Functional Area Point of Contact concur.
- 3. RECOMMENDATION: Adopt the study recommendation to include approved COMPO 4 units in LOGSACS and AAO computations.

FUNCTIONAL AREA: Management and Organization

TOPIC: EUCOM/NAMSA INTERFACE

RECOMMENDATION NUMBER: 137

STUDY LOCATION (VOLUME-PAGE): 27-32

PROPONENT OFFICE: HQDA ODCSLOG (DALO-PLO)

- 1. Reference Study of Army Logistics 1981, Section 27, pages 27-32.
- 2. Statement of Recommendation: "EUCOM expedite development of required financial relationships with NAMSA; cost effectiveness analyses be performed for systems support proposals."
- 3. Rationale for Recommendation: None provided in the Study.
- 4. Analysis of Recommendation: Recommendation was implemented by USAREUR contractual effort prior to its being made in the Study of Army Logistics 1981. EUCOM follow-up effort resulted in negotiation of a blanket support agreement which may facilitate other Service use of NAMSA if requirements arise.
- a. The NATO Mutual Support Act of 1979 (PL 96-323) provided the legislative basis for NAMSA transactions.
- b. USAREUR/DARCOM have been executing support transactions with NAMSA since FY 81. Dollar value of FY 1981 NAMSA transactions is \$132,665.00. Dollar value of projected FY 82 transactions is \$9,707,000.00 and includes the following general categories of transactions:
- (1) Test, measurement, and diagnostic equipment repair and calibration.
 - (2) TOW repair.
 - (3) Communications equipment repair.
 - (4) Repair parts procurement.
- c. Cost effectiveness analysis is performed to the extent necessary by the organization requesting the NAMSA support. However, the primary element to date in determining if NAMSA support is sought is the timely availability of the desired support through US channels. If US provided support is inadequate for any reason and NAMSA support is available, NAMSA support will be arranged within funding limitations.

- 5. Benefits of Implementation: Facilitates acquisition of selected goods or services not readily available in US logistics system. Improves readiness.
- 6. Resources Required for Implementation: None, since the recommendation pertains to an action already completed.
- 7. Method of Implementation: USAREUR contracted with NAMSA to perform the required services. Action completed.
- 8. Relationship to Other Studies: None.
- 9. Relationship to Other Recommendations within the Study of Army Logistics 1981: None.
- 10. Coordination: USEUCOM, USAREUR, FORSCOM, TRADOC, DARCOM, OSD(MRA&L), and ASA(IL&FM), DCSLOG and DCSOPS approved the initial application of PL 96-323 transactions to NAMSA. ASA(IL&FM) concurs.